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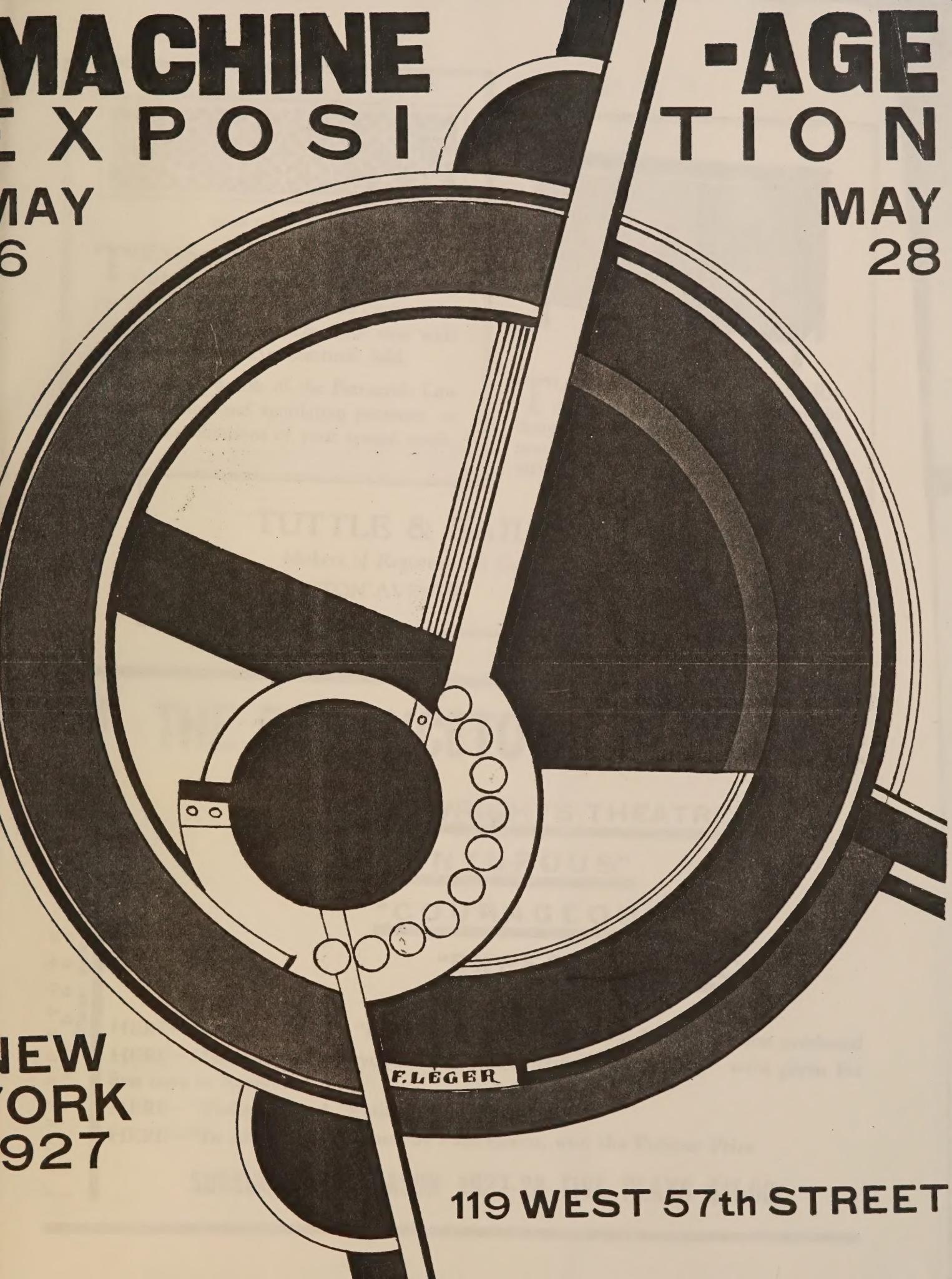


# MACHINE EXPOSI

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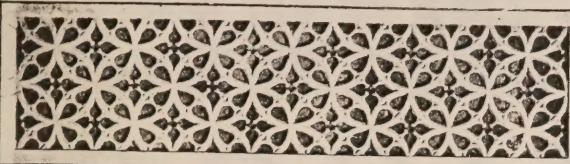
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NEW  
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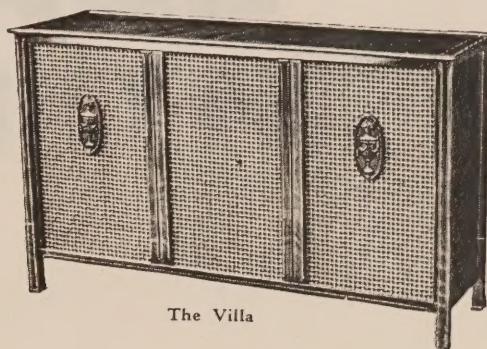




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### ALFRED BOSSOM, NEW YORK

- 1 Project for 35 Story Office Building.

### BUCHMAN & KAHN, NEW YORK

- 2 The Insurance Center Building, N. W.  
Cor. 37th and 6th Avenue.
- 3 Park Avenue Building.

### LEONARD COX, NEW YORK

- 4 Imaginary Project for Skyscraper to cover  
4 city blocks.
- 5 Design for Soldiers and Sailors Memorial.

### HUGH FERRISS, NEW YORK

- 6 Sketch Model of Glass Skyscraper.  
J. H. Sullivan, associated Architect.
- 7 Studies.

### ARTHUR LOOMIS HARMON, NEW YORK

- 8 Model of the Jerusalem Y.M.C.A.
- 9 Photograph of the Hotel Shelton.
- 10 Photographs interior Hotel Shelton.

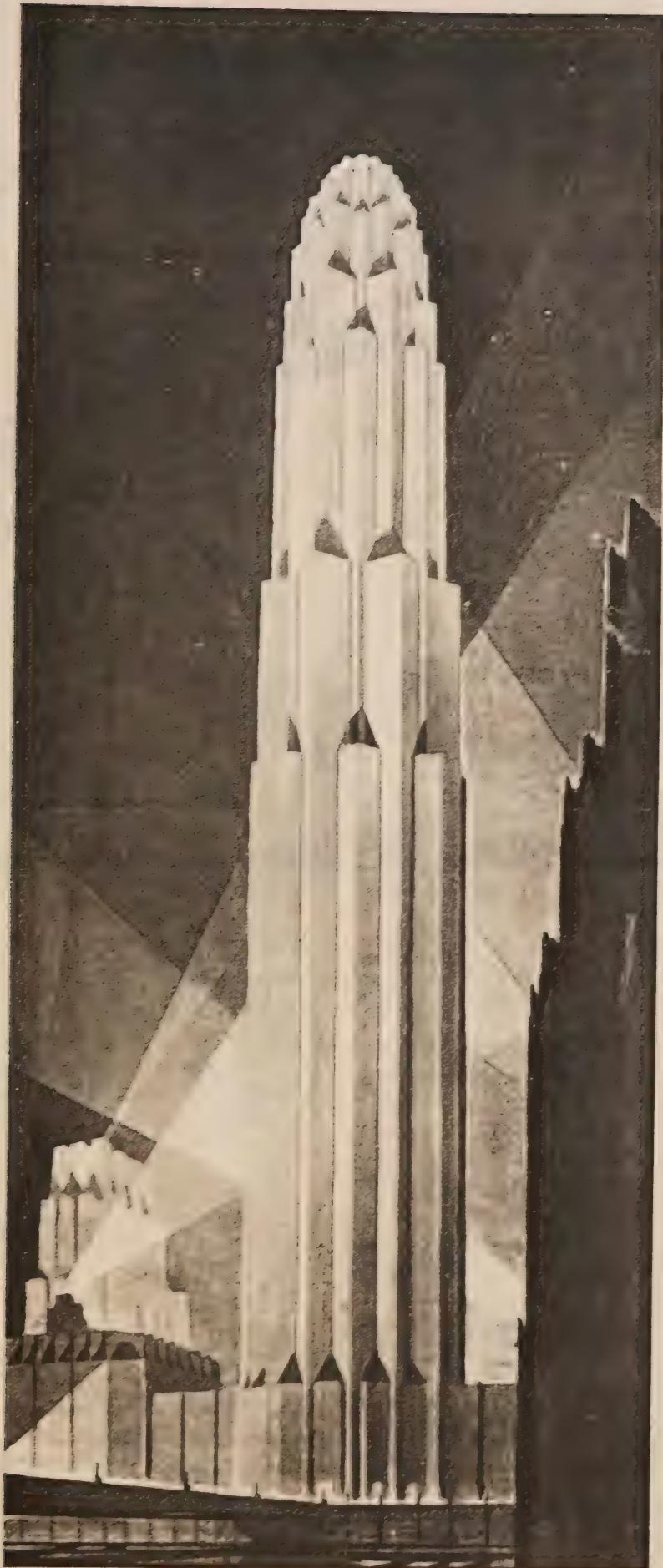
### HEMLE & CORBETT, NEW YORK

- 11 Pennsylvania Power and Light Building.
- 12 Number One Fifth Avenue.



RADIATOR BUILDING  
*Raymond M. Hood*





PROJECT FOR GLASS SKYSCRAPER  
By Hugh Ferriss





## FOREWORD

### ARCHITECTURE OF THIS AGE

LED by obscure springs, there arose in Greece and Rome the mighty Current of thought and instinct which has swept through the subsequent ages. Could one survey this channel, this Grand Canyon, he might mark how the Stream, cleaving Earth, has sculpted and left aloft the stratas of succeeding civilizations and cultures.

We may examine this architectural record. We may see standing—where the stream once was—the exposed strata of the Romanesque; we may note transitions to the Gothic and to the Renaissance.

America overlooked this Grand Canyon. A few decades ago, there appeared a movement in Architecture which has been described as a modern Renaissance. It consisted of this: a unique progress had enabled us to attain a bird's eye view of the Past such as had never before existed. We were free to choose. Our architecta, with the visa of scholarly honor and good taste, swarmed and selected.

Now the question is being asked: Is there not proceeding at this moment a truly unique movement in the Arts?

If one seriously asks himself this question, he may be at first halted by the many affectations of "Modern Art": Architect X is obviously practicing professionally simply because this architect wants to do something "new"; artist Y is painting simply in order to paint artist Z. Does there really exist in the world, at the given moment, any artistic endeavor founded more deeply than in mere personality?

It is a legal fact that in 1918 a regulation was passed in New York City which altered the forms of buildings. This law was passed for certain utilitarian and quite impersonal reasons: to conserve property values, to check traffic congestion, to admit light and air to streets. But this law had a profound effect upon architectural design. Cubes became pyramids. Previously, cube-like masses had been juxtaposed along our avenues in such fashion that but one side of the



mass was exposed. Civic architecture became—and has for long been—a problem of designing one side of a box. Architecture was two-dimensional. Fifth Avenue is a series of stage sets. But pyramids, however juxtaposed, cannot lose identity, location, form, axis and summit. The innovation of the pyramid-like form produced, in the contemporary architectural mind, a situation.

Many architects proceeded to handle the new form as they had been wont to handle the old. They built the familiar pile of Base, Shaft and Capital as high as they, by law, could; they then "stepped back" the structure and built up another form of the same parts—and so on, until they had filled the theoretical pyramid with as many classic cubes as possible.

But at the same time, quite different tendencies appeared: Corbett's Bush building, Harmon's Shelton Hotel, Hood's Radiator building, Saarinen's Tribune tower. As these giant structures march with deliberate stride into American cities, it becomes apparent that we are facing a new architectural race.

• • • • •

May we find, in this age of the Machine, tendencies which are more than local to America? The fact is that exhibits are appearing from all parts of the world which unanimously assault a certain accepted convention of Beauty. What has been the criterion for this conventional Beauty? Has it not been simply Pleasure-Pain? Familiarity? Habit? It has been a convention which has called the matured human form—as sculpted by the Greeks—beautiful. But the potential human form—as sculpted, before birth, by Nature—it would call ugly.

It becomes apparent that if we are prepared to leave the pleasant security of forms already matured by others—if we are willing to expose ourselves to a travail of our own—in this event, we will find that Creation demands of us a dedication from which we must be relinquished by Culture.

It is possible that the very stream which hewed the architectural Grand Canyon is itself about to expire. It is possible that we must look elsewhere. It is possible that another stream is already beginning to flow.

HUGH FERRISS

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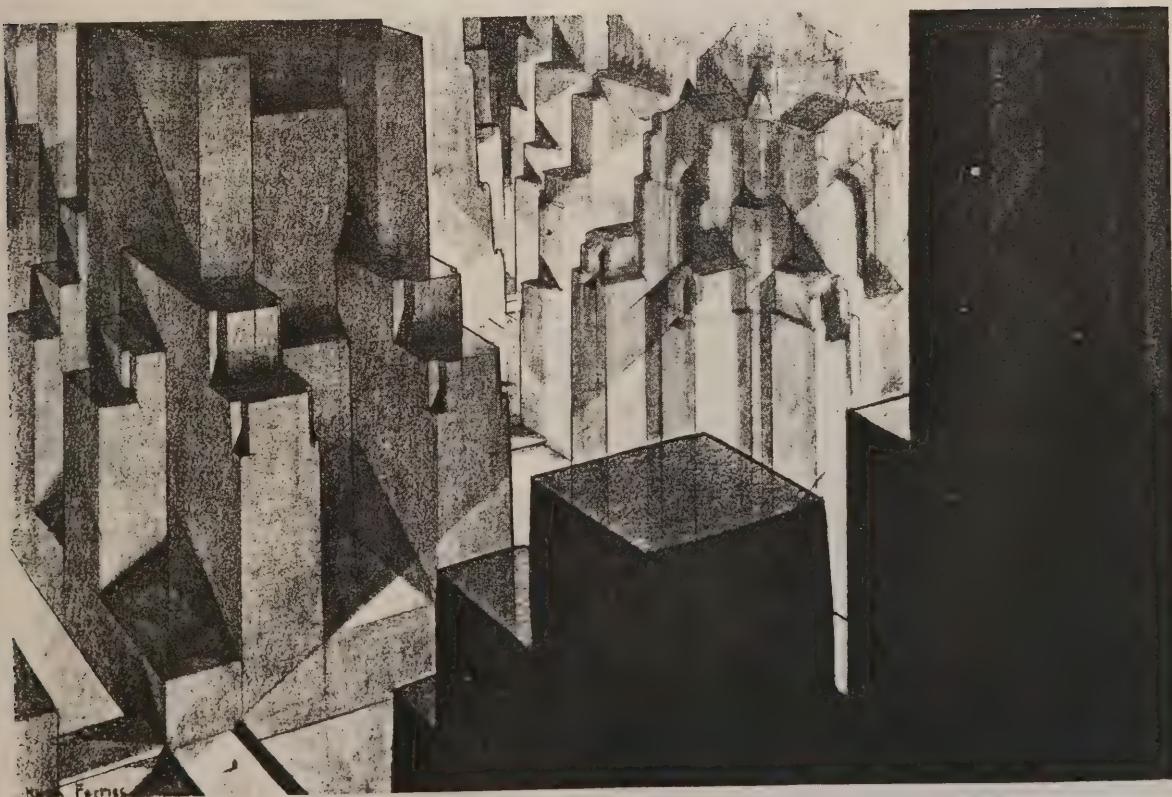
INSURANCE CENTRE BUILDING

*By Buchman & Kahn, Cor.*

*37th and 6th Avenue*

ARCHITECTURE IS THE CRITERION OF  
THE INTEGRITY, THE JUDGMENT, AND  
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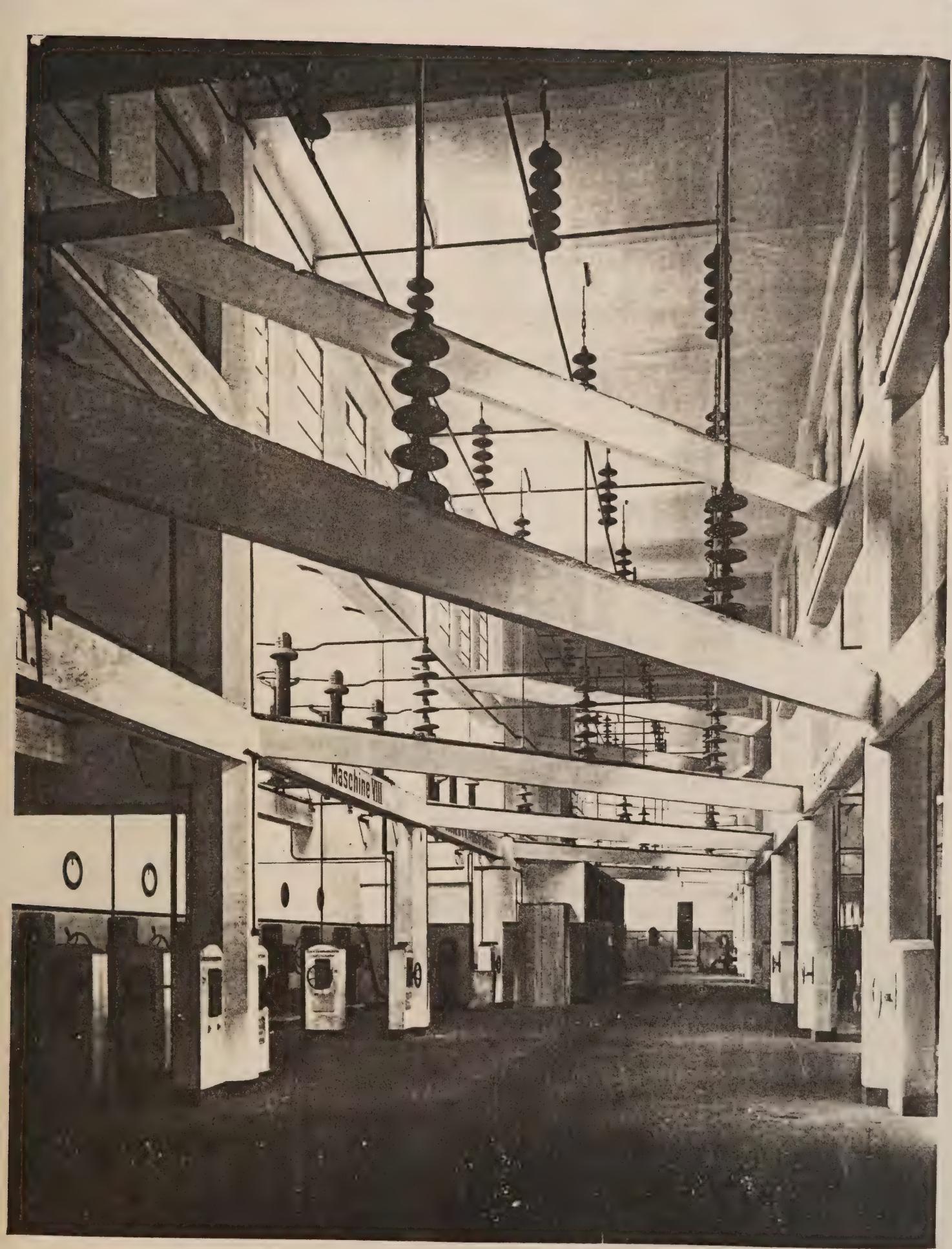
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MASSES

*By Hugh Ferriss*





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# THE AESTHETIC OF THE MACHINE AND MECHANICAL INTROSPECTION IN ART

**I**N THE aesthetic phenomenon of the evolution of the plastic arts the necessity, of considering the Machine and Mechanical elements as new symbols of aesthetic inspiration, has not been sufficiently taken into account.

## PRECURSORS

We Futurists were the first to understand the marvellous mystery of inspiration which machines possess with their own mechanical world.

In fact, Marinetti in his first Manifesto on the Foundation of Futurism published in the Figaro in 1909 stated: "We shall chant the vibrant nocturnal fervour of the arsenals and ship-yards lit by their violent electric moons, the bridges like giant gymnasts striding the rivers, the daring steamers that nose the horizons, the full-breasted locomotives that prance on the rails like enormous iron horses bridled with tubes, the gliding flight of the aeroplanes whose screw flutters in the wind like a flag or seems to applaud like an enthusiastic mob. The racing automobile with its explosive breath and its great serpent-like tubes crawling over the bonnet—an automobile that whizzes like a volley from a machine gun is more beautiful than the victory of Samothrace."

From the appearance of the first Futurist Manifesto of Marinetti up until today, there has been a ceaseless searching and questioning in the field of art. Boccioni in his book, Futurist Sculpture and Painting (1914) stated that the era of the great mechanical individualities has begun; that all the rest is paleontology. Luigi Russolo (in 1913) with his invention of the noise-makers constructed new mechanical instruments to give value to new musical sounds inspired by noise, while Luciano Folgore in his poem the Chant of the Motors (1914) exalted the mechanical beauty of workshops and the overpowering lyricism of machines. Later, in my manifesto entitled Absolute Constructions in Motion-Noise (1915), I revealed by means of new plastic constructions the unknown constructive virtues of the mechanical aesthetic.

While the painter Gino Severini confirmed by means of an admirable theoretical essay in the Mercure de France (1916) the theory that "the process of the construction of a machine is analogous to the constructive process of a work of art."

This Futurist exaltation of ours for the new era of the machines crossed the Italic frontier and awoke echoes among the Dutch, the Russian, the Germans and the Spanish.

Fernand Lèger recently declared his painting to be concerned with the love of those forms created by industry and the clash of the thousand coloured and persuasive reflections of the so called classical subjects.

Guillermo de Torre, the daring Spanish poet and founder of the Ultraist movement, announced in his manifesto "Vertical" in 1918 the forthcoming epoch of the new and mechanical world.

Today we see a new tendency manifesting itself at the recent international Artists Congress of Dusseldorf. This is the movement of the "Constructionists" as exemplified in the works of the Russian, Dutch, German, Scandinavian and Roumanian painters among whom we may note Theo Van Doesburg, Richter, Lissitzky, Eggelin and Janco. The Constructionists, though they take as their starting point an extremely clear theory, announcing the constructive exaltation of the Machine, become inconsistent in the application of their doctrine, confusing exterior form with spiritual content.

We today—without ignoring the attempts that have been made in the course of the last years by ourselves and certain Futurist friends of ours—intend to reassume and synthetize all that which has been expressed individually and incidentally in order to arrive at more complete and more concrete results, in order to be able to realize more fully new aesthetic values in the field of the plastic arts.

Our experience has convinced us of the truth of certain of our plastic truths and has allowed us to perceive the errors that lie in others.



## OLD AND NEW SYMBOLS

In the history of art throughout the ages the symbols and elements of inspiration have been suggested to us by the ancient legends and classic myths created by modern imagination. Today, therefore, where can we look for more contingent inspiration than among the new symbols which are no longer the creation of the imagination or the fantasy—but of human genius?

Is not the machine today the most exuberant of the mystery of human creation? Is it not the new mythical deity which weaves the legends and histories of the contemporary human drama? The Machine in its practical and material function comes to have today in human concepts and thoughts the significance of an ideal and spiritual inspiration.

The artist can only pin his faith to the realities contingent on his own life or to those elements of expression which spiritualize the atmosphere he breathes. The elements and the plastic symbols of the Machine are inevitably as much symbols as a god Pan, the taking down from the Cross, of the Assumption of the Virgin, etc. The logic, therefore, of aesthetic verities becomes self-evident, and develops parallel with the spirit which seeks to contemplate, live and identify itself with reality itself.

## THE AESTHETIC OF THE MACHINE AND MECHANICAL INTROSPECTION

We, today, after having sung and exalted the suggestive inspirational force of the Machine—after having by means of the first plastic works of the new school fixed pure plastic sensations and emotions, see now the outlines of the new aesthetic of The Machine appearing on the horizon like a fly wheel all fiery from Eternal Motion.

## WE THEREFORE PROCLAIM

1. The Machine to be the tutelary symbol of the universal dynamism, potentially embodying in itself the essential elements of human creation: the discoverer of fresh developments in modern aesthetics.

2. The aesthetic virtues of the machine and the metaphysical meaning of its motions and movements constitute the new font of inspiration for the evolution and development of contemporaneous plastic arts.

3. The plastic exaltation of The Machine and the mechanical elements must not be conceived in their exterior reality, that is in formal representations of the elements which make up The Machine itself, but rather in the plastic-mechanical analogy that The Machine suggests to us in connection with various spiritual realities.

4. The stylistic modifications of Mechanical Art arise from The Machine-as-interferential-element.

5. The machine marks the rhythm of human psychology and beats time for our spiritual exaltations. Therefore it is inevitable and consequent to the evolution of the plastic arts of our day.

**ENRICO PRAMPOLINI**

(Translated by E. S.)

Reprint from Little Review.

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67 Perspective of the Vestibule in the Beethoven Memorial in Vienna.  
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PROJECT FOR BEETHOVEN MUSIC HALL IN VIENNA  
By Joseph Hoffmann





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### **CLASS IN ARCHITECTURE**

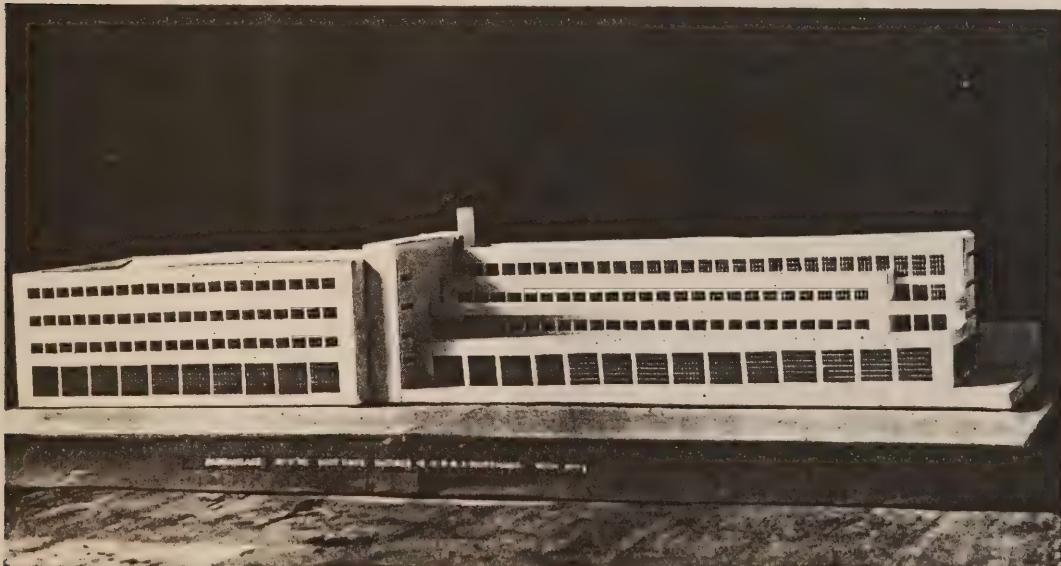
**PROFESSOR DR. M. C. J. HOFFMANN,  
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**PROJECT FOR BATH-HOUSE (MODEL)**  
By Lili Engel, Pupil in Master-Class Prof. Joseph Hoffmann,  
Vienna



# MACHINE AND ART

IT IS indisputable that the basis of Art always remain the same, even though the exterior forms of Art change, the spirit of the epochs is reflected in these forms. Before the period of the Renaissance, Art was bound to the religion, and was mystic in general. These variation of forms were called "Style". Thru these different styles, we recognize the different spirits of the epochs which are reflected therein.

Let us look at the Egyptian style which, through its monumental character, reminds us of the mysteries of the eternity of the Earth.

Let us look at the Gothic style which precipitates itself towards the heights of religious spirit. This style was only possible during the Middle Ages when the tension of religious belief was pushed to extremes. Many other outside expressions tell us of the spirit of passed epochs.

I prefer not to dwell on the period of the Renaissance, because this form of Art contains less than any other, and I think that the historians are wrong in calling that period "Renaissance" for it was, in truth, the decadence.

Let us take the present epoch—The Machine Age. If we were not so close to it to-day, and if we could see with an eye embracing many centuries at one time, it would be easy for us to distinguish that the present period is the time of Machine and Action.

Since Art is the reflection of life, it is evident that the Art of to-day must be bound to Action. I willingly attack this subject for, at present, I am working in that direction myself. There is great danger if the bad road be taken in solving the problem of the union of Art with the Machine. I am giving, herein, the dangerous road as well as the correct road.

I find the dangerous road in painting which represents only fragments of machines. For example, futurism and dadaism. The artists of these two schools have painted and installed in their pictures, fragmentary wheels, mechanical parts in an illogical order which only express Rhythm, not the rhythm of movement, but rather the rhythm of distance and color. These paintings remind us of junk shops, but in no case do they speak of our time, the Epoch of Action.

I do not think that the right road would be



SCULPTURE  
By Alexandre Archipenko



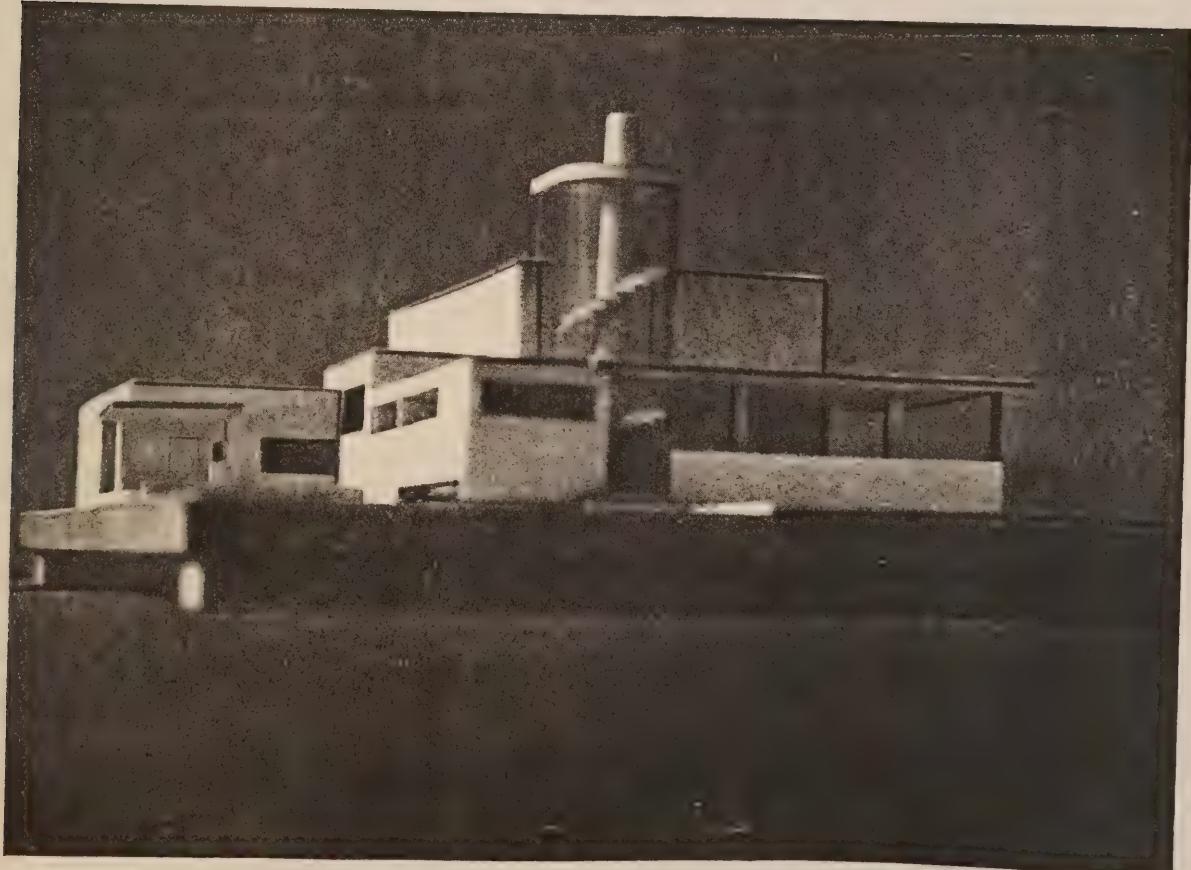
to build a machine which would accomplish the movement, even if this machine were useful: an automobile or a turbine. I see the right road for the union of Art with Action, only by means which permit the interpretation of Action through movable forms and colors. I have been working directly in this for several years, being inspired by the Einstein Theory of Relativity as well as by the ambience of the most modern city of the world, New York.

I have invented "Peinture Changeante" with which I can paint different movements, rhythms, all kinds of changes and transformations of line, color, form and subject, beginning with naturalistic forms through the most abstract forms. This invention is called "Archipentura" which means, superior painting. I do not disapprove of static painting which has reflected the most refined variations of the soul and human spirit, but as this painting does not possess the means of reproducing the real action, I do not think it the right means to express our time of Action. To this end, Archipentura is superlative, because it can show real action in the picture.

#### ALEXANDER ARCHIPENKO



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By Knud Lonberg-Holm





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*Louis Lozowick*

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- 130 Plan of the City of Kappeleveld (houses in the city by the architects Hoste, Hoeven, Rubbers, Pompe).

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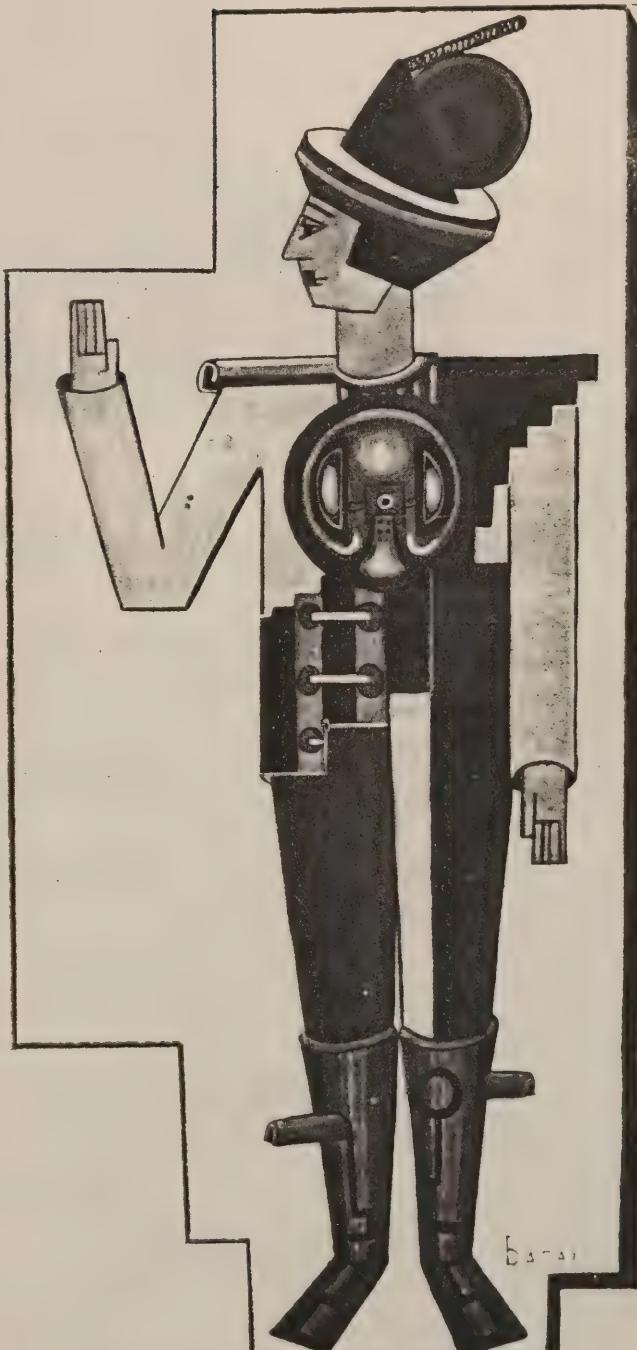
- 131 House at Ghent.

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- 132 Corner house with apartments.
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**COSTUME FOR "MACHINE-VENGEANCE"**  
*By Vera Idelson*





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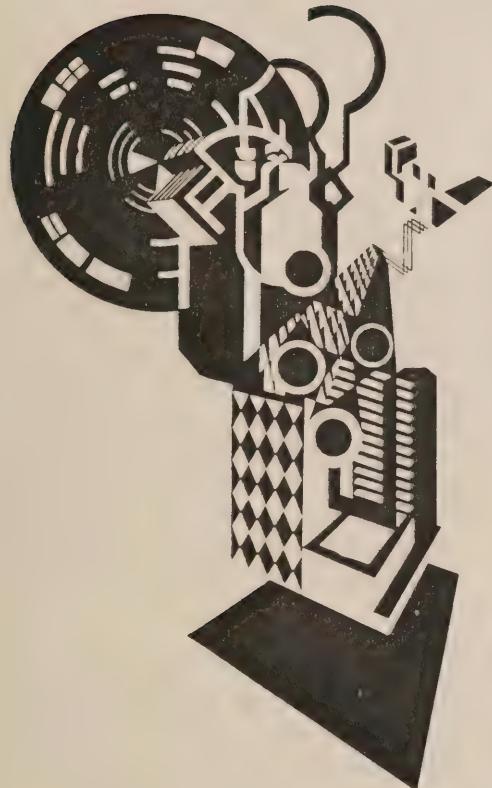
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Loaned by Helena Rubenstein.





Louis Lozowick

## THE AMERICANIZATION OF ART

**I**F ONE were to grant the allegation that America possesses a meagre cultural heritage and lacks the weight of established tradition, it would by no means follow that material for creative activity in wanting. The intriguing novelty, the crude virility, the stupendous magnitude of the new American environment furnishes such material in extravagant abundance. To the truly creative artist the fallow rawness of the field should prove only an additional incentive to its intensive cultivation. The artist's task is to sift and sort the material at hand, mold it to his purpose by separating the plastically essential from the adventitious and, in this manner, enrich the existing culture and help to establish a new tradition.

The history of America is a history of stubborn and ceaseless effort to harness the forces of nature—a constant perfecting of the tools and processes which make the mastery of these forces possible. The history of America is a history of

gigantic engineering feats and colossal mechanical construction.

The skyscrapers of New York, the grain elevators of Minneapolis, the steel mills of Pittsburgh, the oil wells of Oklahoma, the copper mines of Butte, the lumber yards of Seattle give the American industrial epic in its diapason.

Environment, however, is not in itself art but only raw material which becomes art when reconstructed by the artist according to the requirement of aesthetic form. The artist cannot and should not, therefore, attempt a literal soulless transcription of the American scene but rather give a penetrating creative interpretation of it, which, while including everything relevant to the subject depicted, would exclude everything irrelevant to the plastic possibilities of that subject.

Every epoch conditions the artist's attitude and the manner of his expression very subtly and in devious ways. He observes and absorbs environmental facts, social currents, philosophic speculation and then chooses the elements for his work in such fashion and focuses attention on such aspects of the environment as will reveal his own esthetic vision as well as the essential character of the environment which conditioned it.

The dominant trend in America of today is towards an industrialization and standardization which require precise adjustment of structure to function which dictate an economic utilization of processes and materials and thereby foster in man a spirit of objectivity excluding all emotional aberration and accustom his vision to shapes and color not paralleled in nature.

The dominant trend in America of today, beneath all the apparent chaos and confusion is towards order and organization which find their outward sign and symbol in the rigid geometry of the American city: in the verticals of its smoke stacks, in the parallels of its car tracks, the squares of its streets, the cubes of its factories, the arc of its bridges, the cylinders of its gas tanks.

Upon this underlying mathematical pattern as a scaffolding may be built a solid plastic structure of great intricacy and subtlety. The artist who confronts his task with original vision and accomplished craftsmanship, will note with exactitude the articulation, solidity and weight of advancing and receding masses, will define with precision the space around objects and be-



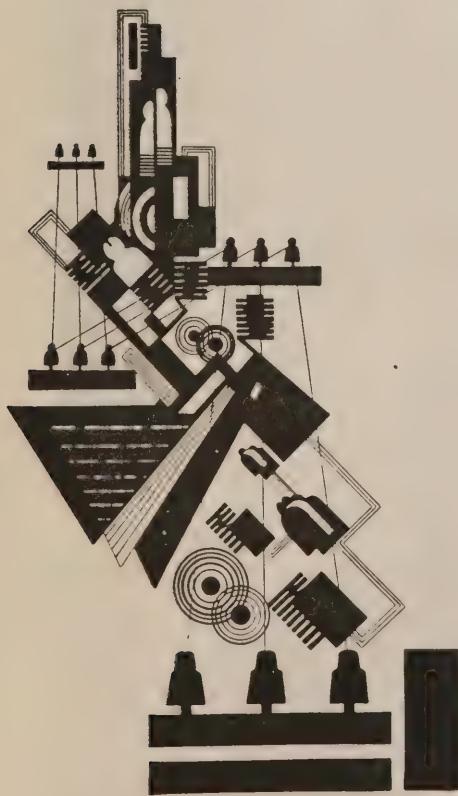
tween them; he will organize line, plane and volume into a well knit design, arrange color and light into a pattern of contrast and harmony and weave organically into every composition and all prevailing rhythm and equilibrium. The true artist will in sum objectify the dominant experience of our epoch in plastic terms that possess value for more than this epoch alone.

A composition is most effective when its elements are used in a double function: associative, establishing contact with concrete objects of the real world and aesthetic, serving to create plastic values. The intrinsic importance of the contemporary theme may thus be immensely enhanced by the formal significance of the treatment. In this manner the flowing rhythm of modern America may be gripped and stayed and its synthesis eloquently rendered in the native idiom.

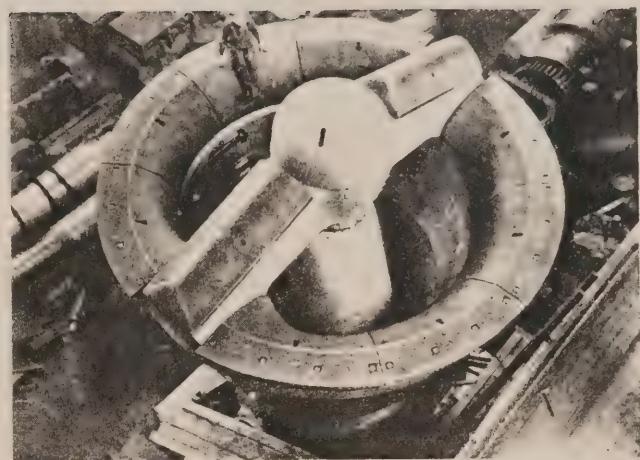
The whole of mankind is vitally affected by industrial development and if the artist can make his work clear in its intention, convincing in its reality, inevitable in its logic, his potential audience will be practically universal.

And this is perhaps as high a goal as any artist might hope to attain.

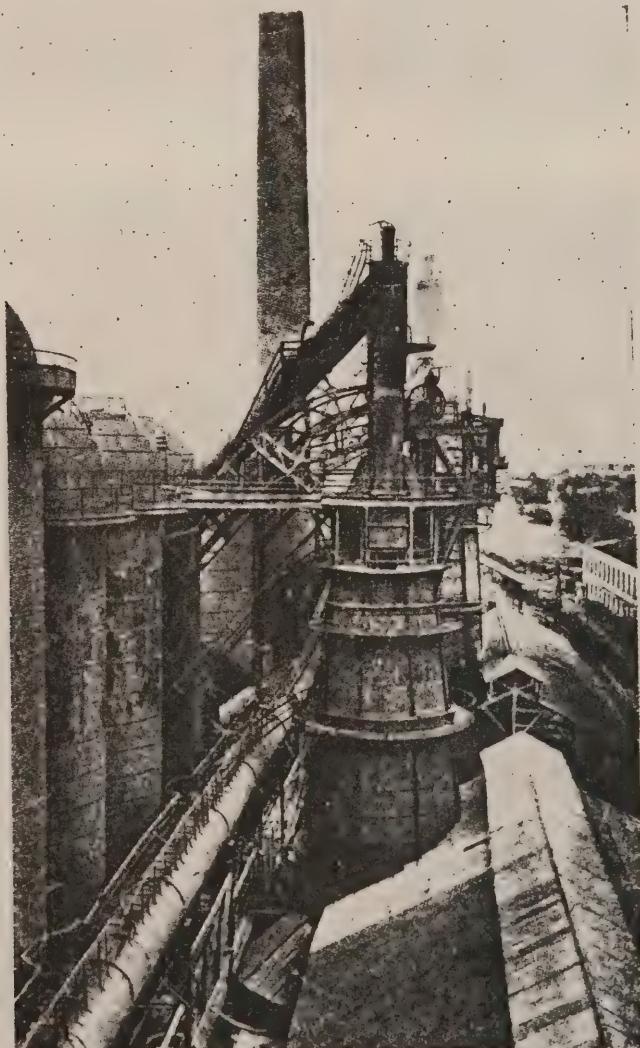
LOUIS LOZOWICK



Louis Lozowick

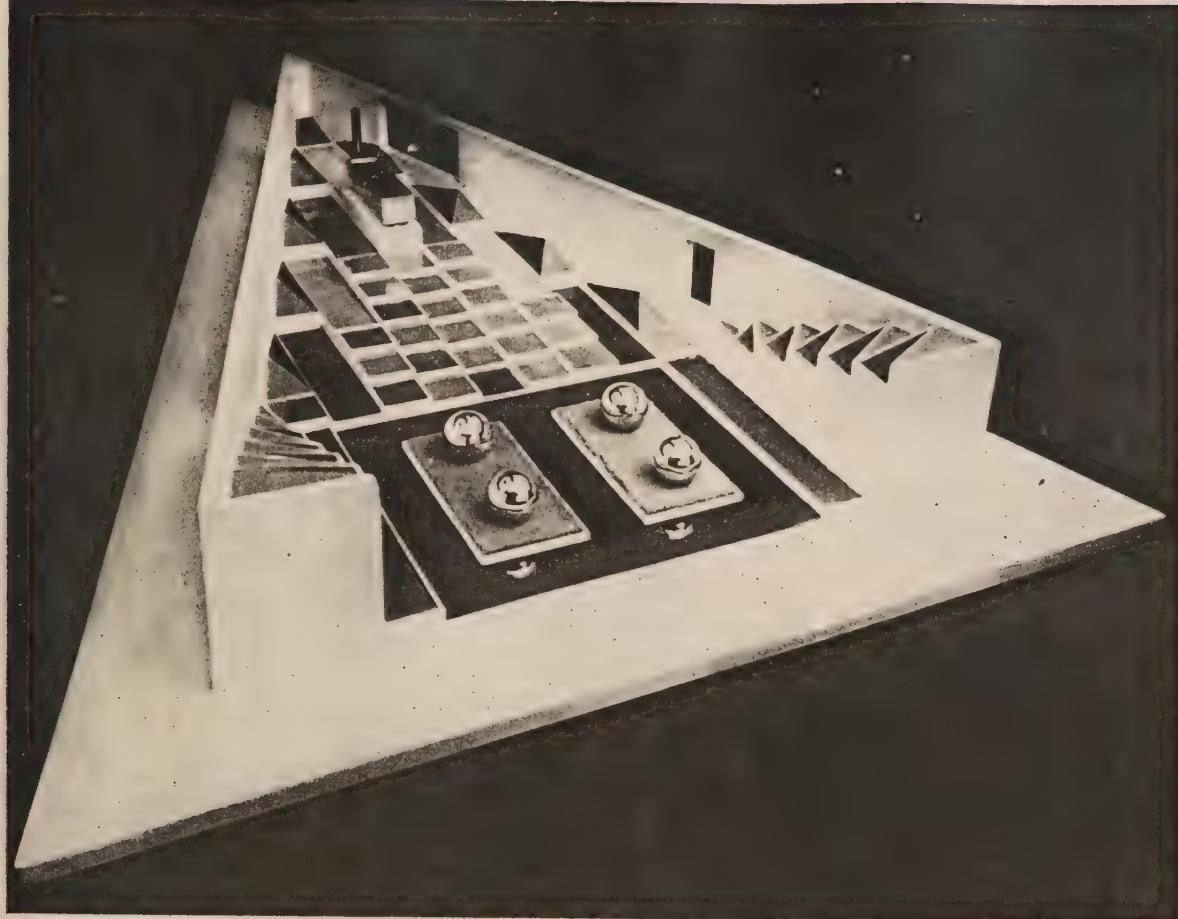


60" SUPERIOR McCULLY ALL STEEL GYRATORY CRUSHER  
Built by Allis-Chalmers

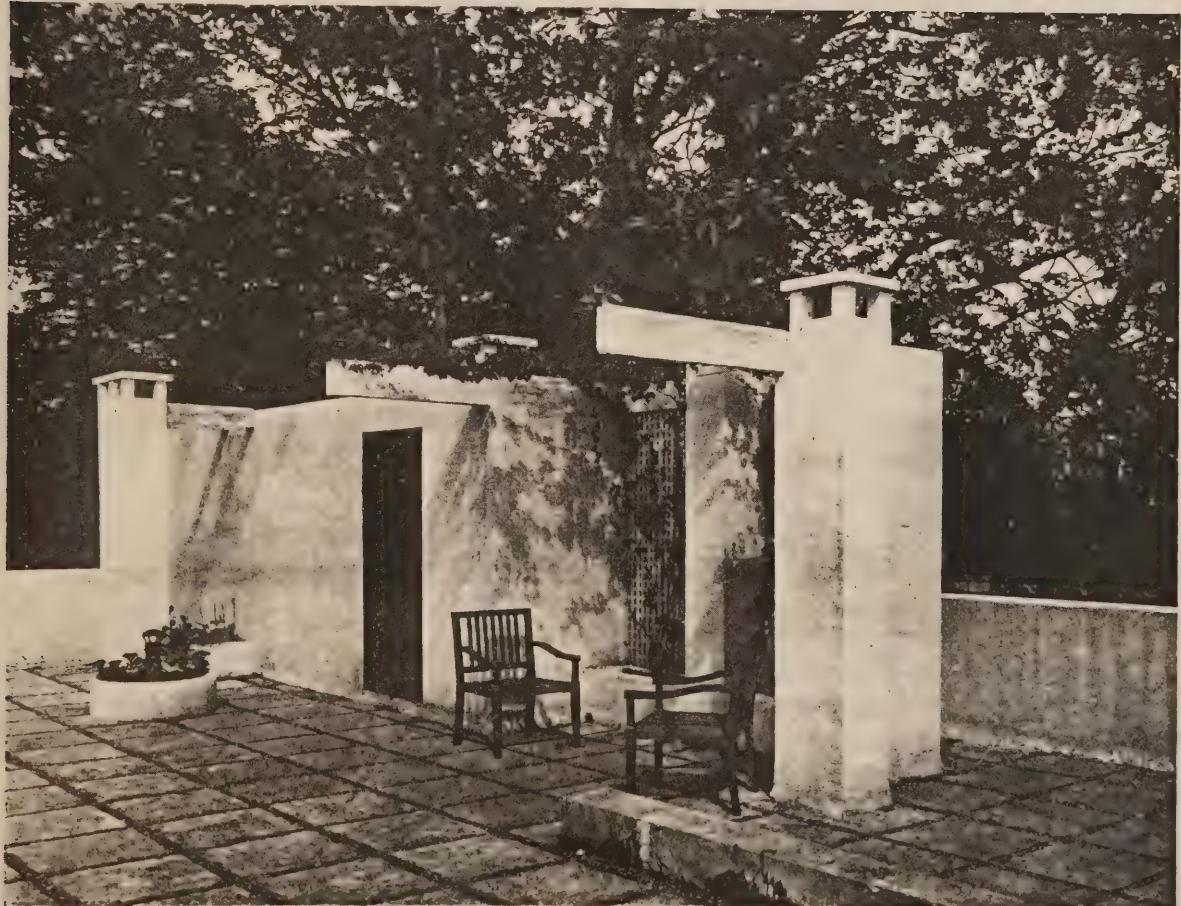


INDUSTRIAL PLANT  
Russia





GARDEN FOR MON. LE VICOMTE DE NOAILLES A HYERES  
By Gabriel Guevrekian



ROOF GARDEN, HOUSE OF MON. E. B., VERSAILLES  
By André Lurcat





VILLA AT GROSLAY NEAR PARIS

*By Jean Moreux*



HOUSE AT BOULOGNE-SUR-SEINE

*By Robert Mallet-Stevens*

## FRANCE

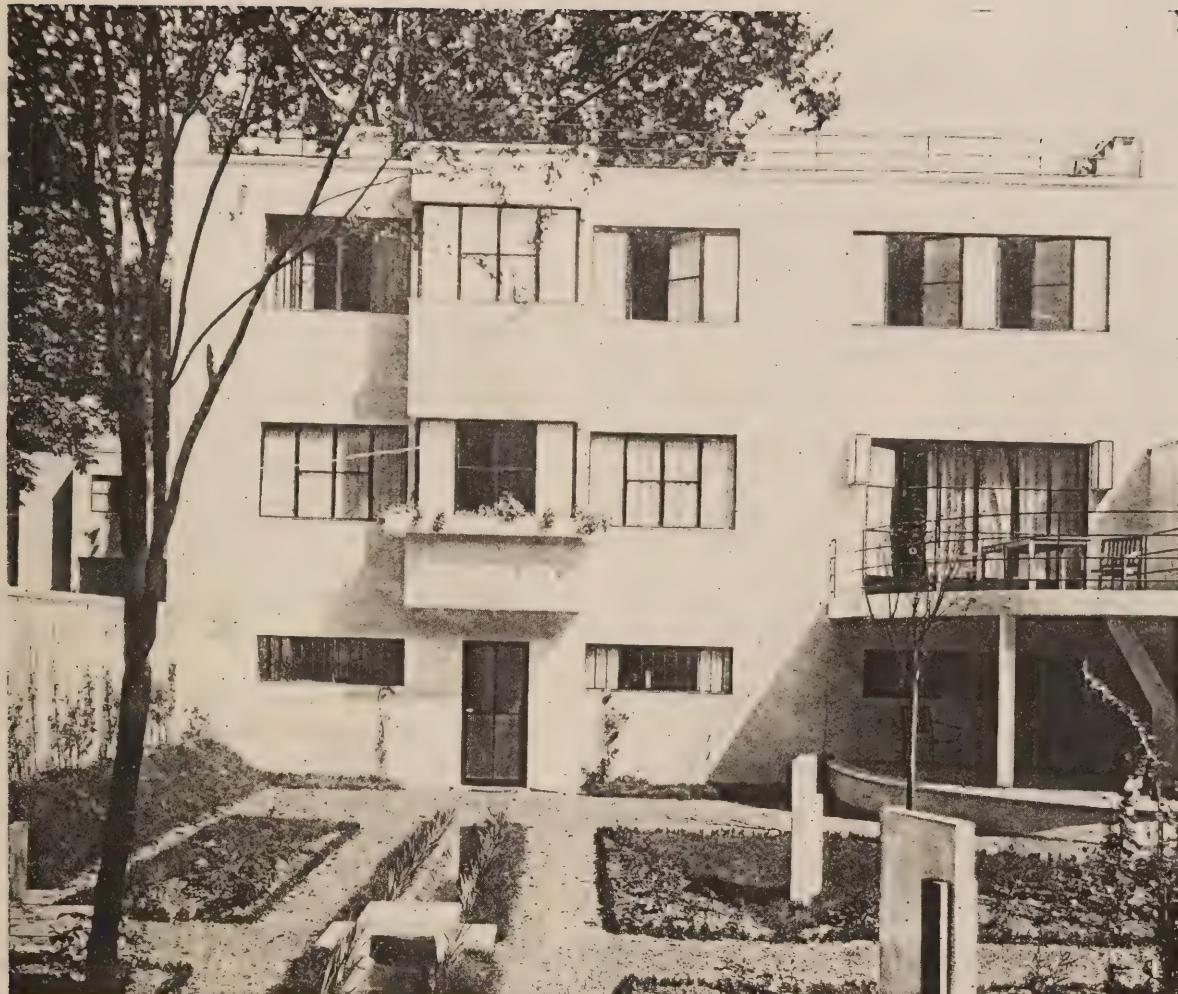
### GABRIEL GUEVREKIAN, PARIS

- 136 Photograph—Garden for Mon. Le Vicomte de Noailles A Hyeres.
- 137 Plan for same.
- 138 Colour drawing of same.
- 139-140 Photographs of model for Garage.
- 141-146 Studio Alban.
- 147 Plan Perspective Axometrique of same.
- 148 Villa for Mon. R. W.
- 149 Arts Decoratifs, Paris, 1925.
- 150 Garden Arts Decoratif.
- 151 Music Shop "Au Sacre du Printemps."
- 152 Music Shop "Au Sacre du Printemps," Interior.
- 153-157 Plans for Garage.

### ANDRE LURCAT, PARIS

- 158 Plan for Workingmen's Dwellings.
- 159 House of Mme. E. B. Cite Jeuret-Paris..
- 160 House of Mme. E. B. Cite Jeuret-Paris, Garden Facade.
- 161 House of Mme. E. B. Cite Jeuret-Paris, Interior Stairway.
- 162 Garden of same.
- 163 House of Mon. A. M., Versailles.





GARDEN FACADE, HOUSE OF MON. E. B., VERSAILLES  
By André Lurçat

- 164 House of Mon. A. M., Garden Facade North.
- 165 House of Mon. Jean Lurçat (Painter).
- 166 House of Mon. F. T. Cite Jeuret.
- 167 House of Mon. E. B., Versailles.
- 168 Living Room of same.
- 169 Furniture in Library by Gravures.
- 170 Houses of Mon. A. H. and Mme. E. B.  
Cite Seurat, Garden Facade.

#### J. CH. MOREUX, PARIS

171-172 Plans.

#### ROBERT MALLET-STEVENS, PARIS

172 Photograph, House at Boulonge-sur-Seine.

## FRENCH ARCHITECTURE

THE BALANCE sheet of French architecture up to the time of the present movement may be summed up as follows: Tradition abandoned in 1820; since then a century lost.

This unfortunate result has come about in spite of the isolated efforts of such architects as Viollet-le-Duc, de Baudot, Tony Garnier and Perret to recover the line of pure tradition. The lack of response to their work may be accounted for by the general confidence felt in the teaching given by the state schools under the successive governments of the past century.



Our School of Fine Arts was founded a hundred years ago on a false theory, and from the beginning its teaching has been empty and unreal, based on a misunderstanding of tradition. It must die now of its own malady; we can do nothing to help it.

In the first years after the war a few architects appeared who had observed the spirit and needs of their time closely. These men were trying to draw up technical and aesthetic laws for new buildings, adapted to modern life and enriched with the immense possibilities offered by the expansion of industry. Under the stimulus of such an opportunity very young architects, not connected with any official organizations, are now beginning to develop, thereby justifying their forerunners.

The Frenchman, who is both intelligent and distrustful, has a fear of innovators. He must observe them before accepting them. This resistance, however, is a source of fresh energy for us, as only those who welcome struggle and opposition will survive. The hangers-on of the early days are being automatically eliminated, and our own efforts are consequently more focussed and willed.

The few "modern" architects in France today—for we are not many—may be considered innovators. (1)

Unfortunately our small number is not all that prevents effective action. We are also hampered by our fundamentally individualistic habit of mind: no organization, and hence a scattering of effort; no influence in official quarters when competitions are held; and no aid from the state for propaganda in France or abroad. These are serious drawbacks in our time, when architecture should be essentially collective.

The "modern" architect in France at present is completely isolated, unknown by the public and ignored by artists.

It is important to stress the continuity of the instinct which leads French architecture away from theoretical research and toward constructions uniting both plastic and structural values. During those years which were so rich for us in plastic, and so lean in technical experience, we were concerned chiefly in saving the intellectual and structural values from being wiped out. But we also had to avoid the dangers of the

machine-attitude (a misunderstanding of a new form of beauty), which could result only in suppressing all life and lyric quality in the plastic expression of an art already abstract in itself.

We began by completely shedding all decorative formulas and following simply the nature of our materials. This brought inevitably the unity of appearance and simplicity of expression which are the strict basis for the future of a new plastic development.

Our first constructions show clearly that we are using only primary elements, whether in volume: cube, prism, cylinder, sphere; or in surface: square, rectangle, circle.

The future will show whether this shedding of an empty culture, resulting from a plastic purification and the economic conditions of our time, has helped to develop architects who will recapture the tradition abandoned a hundred years ago and who, for this purpose, will find the laws of their own aesthetic within themselves.

ANDRÉ LURCAT

January, 1926

(1) YOUNG FRENCH ARCHITECTS:

Guévrékian, Le Corbusier, André Lurçat, Mallet-Stevens, Moreux, Guilleminot.

To be recalled: Auguste Perret, Tony Garnier.

(2) CONSTRUCTIONS:

Guévrékian: shops and gardens.

Le Corbusier: private houses, Paris and vicinity; public garden, Bordeaux-Pessac.

André Lurçat: private houses, Paris and vicinity.

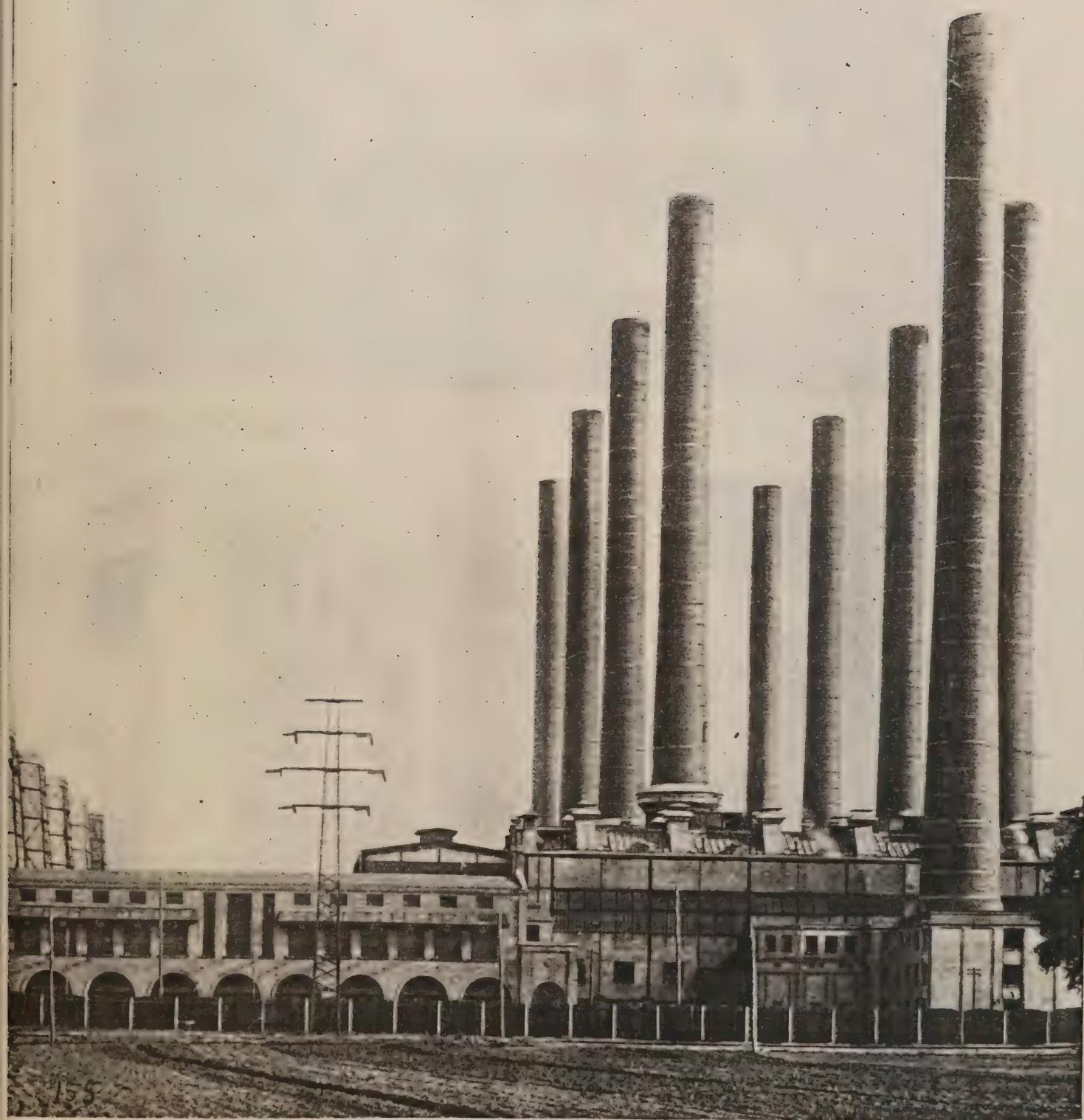
Mallet-Stevens: private houses, Paris and the provinces; garage.

Moreux: industrial plant, Paris; country homes in vicinity.

Guilleminot:

Note: Since this article was written, the impulse of the young has gained strength and the public seems much more favorable to our movement, apparently recognizing its necessity and truth.

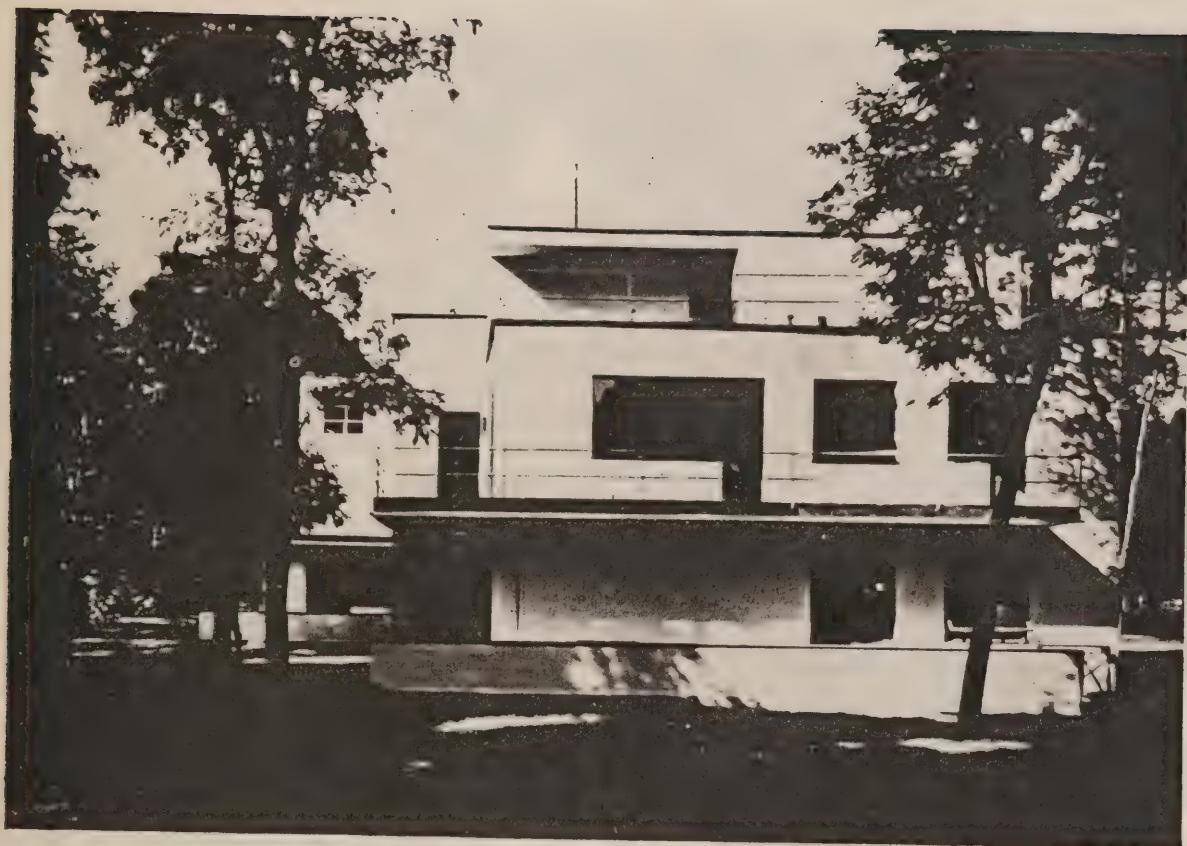




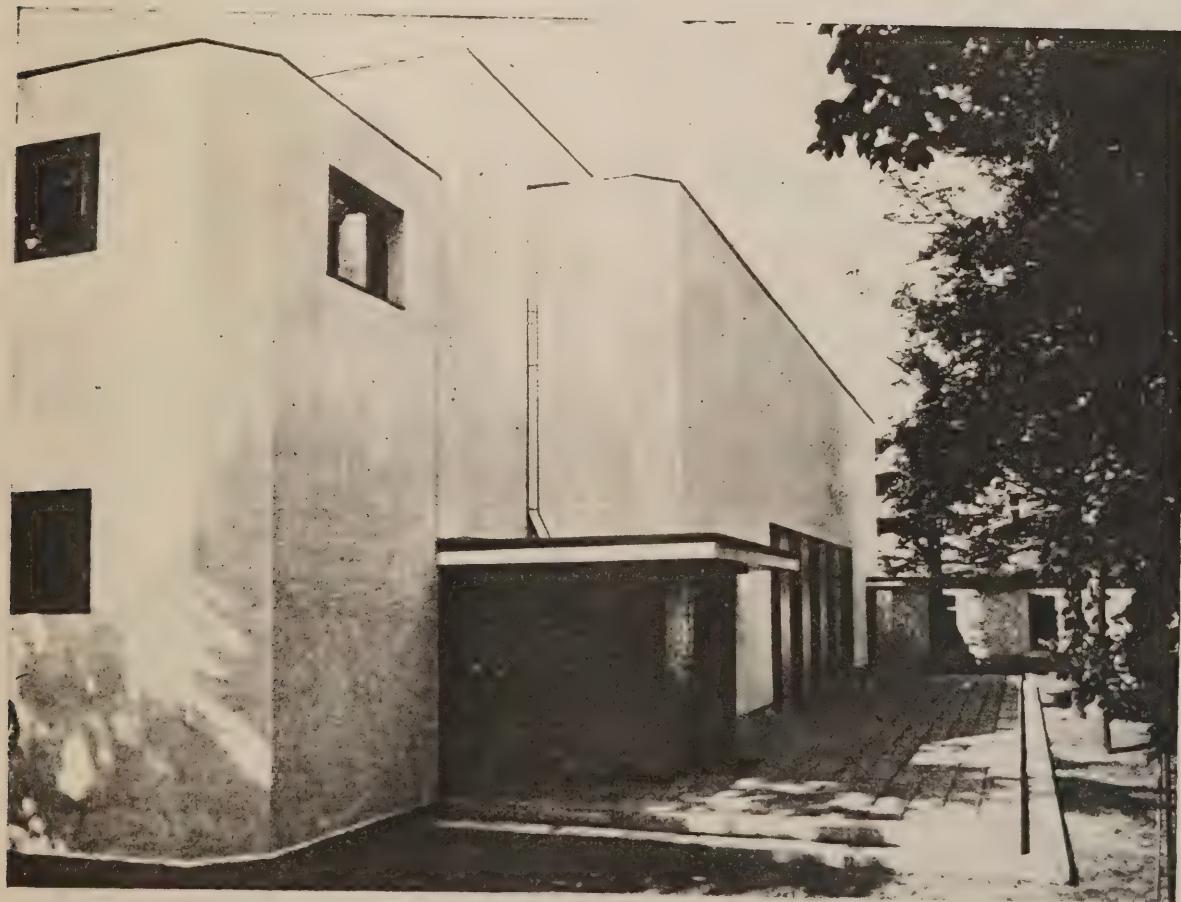
155

POWER PLANT  
*Germany*





**DOUBLE-HOUSE, BAUHAUS**  
*Dessau Germany, By Walter Gropius*



**STATE THEATRE JENA**  
*By Walter Gropius and Adolph Meyer, Germany*





BERLIN CENTRAL AIRPORT AT NIGHT  
*Photograph Courtesy German Railroads*



CHILI-HOUSE, HAMBURG

## GERMANY

### GERMANY

- 173 Municipal Gas-Works Berlin, Photograph.
- 174-179 Industrial Architecture, Photographs.
- 180 Modern Factory Building, Hanover.
- 181 Photograph 4 motor-nine passenger plane "Air Hansa."
- 182 Photograph, Berlin's new West Harbor.
- 183 Photograph, Three motor plane manned by two pilots.
- 184 Photograph, The Bow of Chili House, Hamburg.
- 185 Photograph, Giant Cooling Tower Berlin Generating Station.
- 186-209 Photograph, New German Architecture.
- 210-211 Photograph, Factory, Eric Mendelsohn.
- 212 State Theatre Jena, Walter Gropius and Adolph Meyer.
- 213 Model for a Garage for 1000 Automobiles.





ATELIER AT BAUHAUS  
*Dessau Germany, By Walter Gropius*



MODEL FOR A GARAGE FOR 1000 AUTOMOBILES  
*By The Brothers Luckhardt and Alfons Anker, Berlin*



- 331 Porcelain Computing Cylinder Scale, which automatically indicates the weight and price of the article being weighed.  
 332 Mahogany Fully Automatic Card Time Recorder, equipped with program device to ring bells, sirens or other signal equipment.

### ALEXANDER ARCHIPENKO

- 333 "The Glorification of Beauty" Silver Bronze.  
 334 "Flat Torso" Gilded Bronze.  
 335 "Silhouette of a Woman" Bronze.

### J. R. HERTER & CO.

- 336 "Spring" (Printemps) Modern.  
 337 Stained Glass Effect (Copy of Mediaeval design modern treatment).  
 338 Flower Basket (La Vasque) Modern.

### JACQUES LIPSCHITZ

- 339 Toreador.  
 340 Woman.  
 341 Musical Instrument.

### MAN RAY

- 342 Chess.

### OSSIP ZADKINE

- 343 Head of Young Man.  
 344 Lady with Fan.

### THE FAFNIR BEARING CO.

- 345 Double row, radial bearing, self-aligning type.

### AMERICAN CAR & FOUNDRY

- 346 Model of 47ft A. C. F. Cruiser.

### CHARLES DEMUTH

- 347 "Business".  
 348 "From the Window of the Chateau".

### THEO. VAN DOESBERG

- 349 Card Players.  
 350 Colour Construction.  
 351-353 Time Space Constructions.

### LETT-HAINES

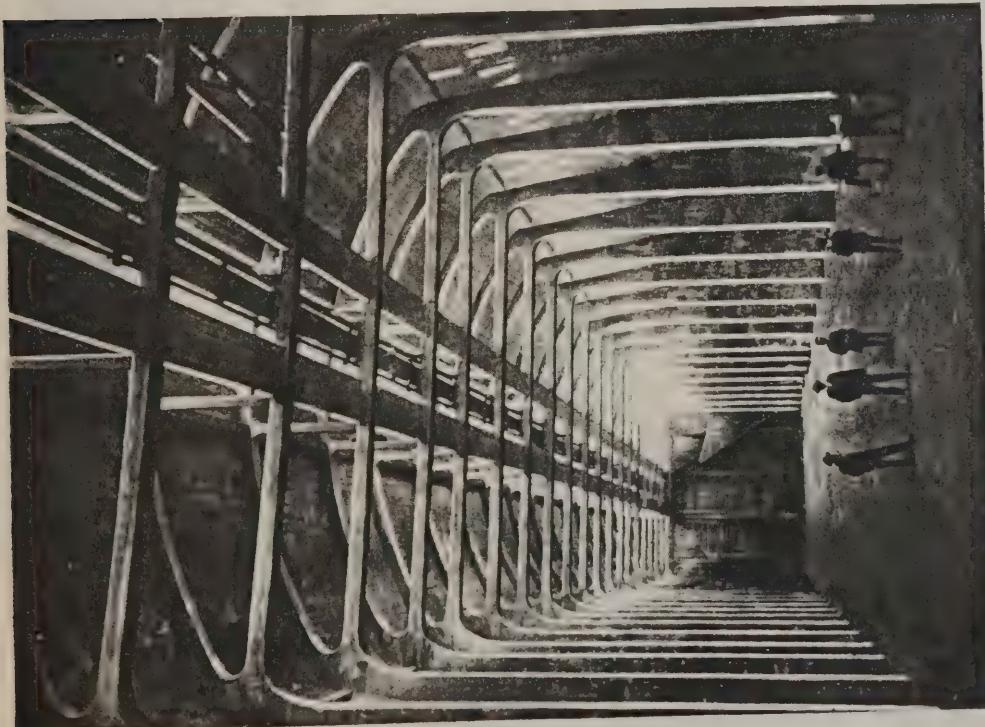
- 354 Painting.

### PEVZNER

- 355 Wall Decoration (Red).  
 356 Wall Decoration (Cork).  
 357 Construction in Relief.  
 358 Head.  
 359 Head.

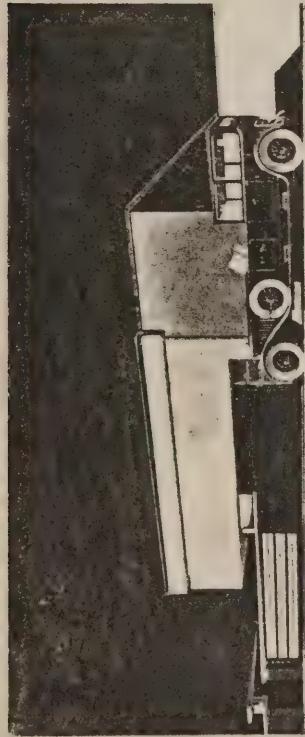
### GABO

- 360 Lighting Tower.  
 361 Torso.



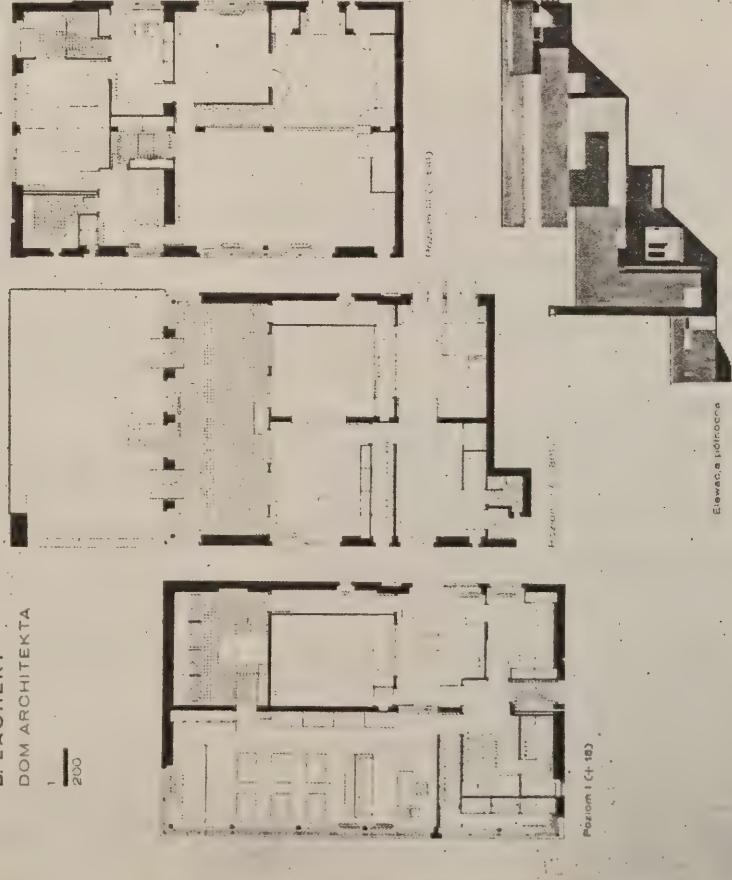
RAW SULPHUR STORE-ROOM, GERMAN INDUSTRIAL  
ARCHITECTURE  
*Photograph Courtesy German Railroads*



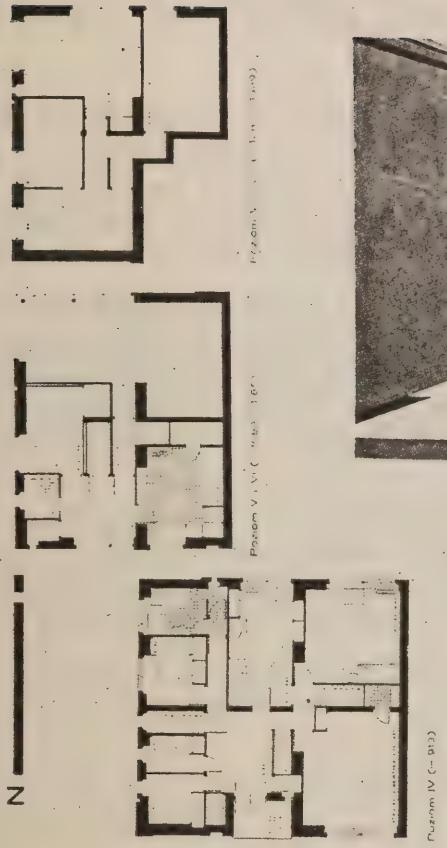


B. LACHERT  
DOM ARCHITEKTA

1



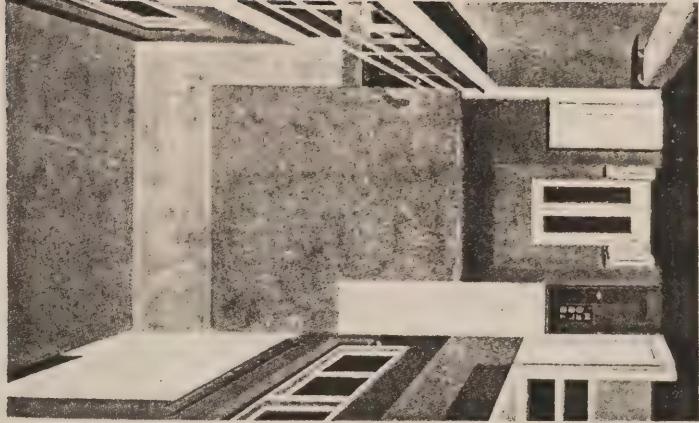
DOM ARCHITECTA  
By B. Lachert



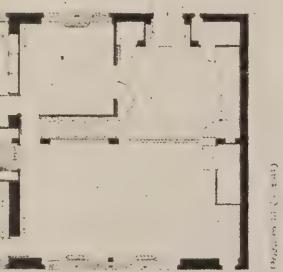
卷之三

میر، علی، احمد

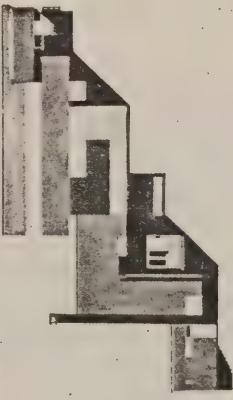
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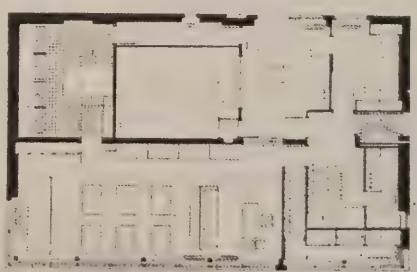
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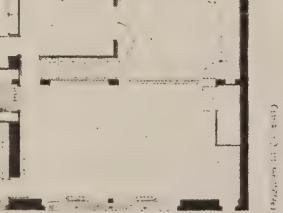
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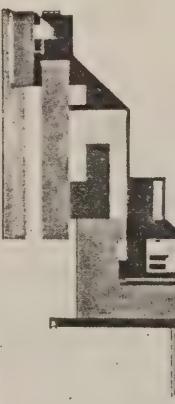
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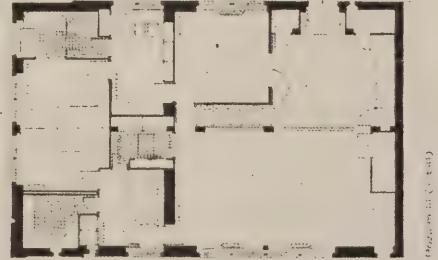
Position 1 (+



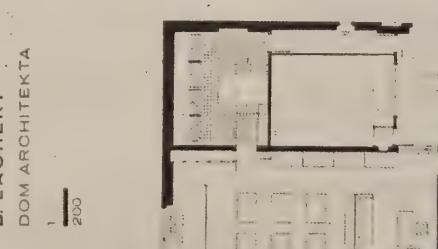
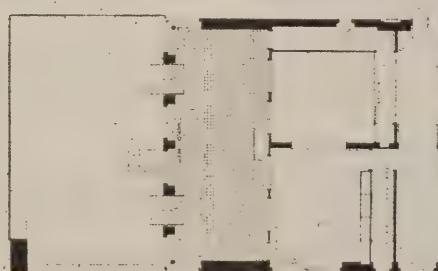
卷之三



Ebewac, a 1915.0Cra



卷之三



19



# ARCHITECTURE OPENS UP VOLUME

**O**F ALL the plastic arts architecture is the most closely bound to human life—life conceived not merely as a physiological function but also as a certain process of vital rhythm, as the composition of life.

An architectural work blends with space. It might be said to recover the space which is outside and to functionalize the space which is inside it. That is to say, it gives a well-defined purpose to each segment of space which enters into it.

The functioning of space, entering into an architectural work acts as a scale. In every house, during the period of its destiny, daily life is played upon the notes of that scale.

The construction of a modern building is based upon a new conception of space in architecture.

The architect of the past **ENCLOSED SPACE IN VOLUME**.

The historical steps in the conception of space in architecture may be indicated as follows:

## CLASSIC ARCHITECTURE

placed volumes side by side or on top of each other—the lighter on the heavier. The problems of form were solved by a juggling of proportions, which at that time expressed the whole notion of art.

Result: the period of revolt, characterized by an aesthetic hypertrophy and the degeneration of ideas of proportion.

Consequently modern art renounces classic art from the ground up and even refuses to try to modernize it.

## CUBISM

made efforts to unite volumes by means of their reciprocal penetration.

## CONSTRUCTIVISM

placed heavier volumes on top of the lighter. Problems of form were neglected in favor of problems of pure technique.

Result: technical hypertrophy.

## SUPREMATISM

balanced the relationships between volumes.

## PURISM

made compositions of the lines of walls, enclosing space.

## THE NEW LAWS OF ARCHITECTURE

are based on a heroic composition of communicating passages, and neither place volumes on top of each other nor side by side. **THEY DESTROY VOLUME ONCE FOR ALL.**

Modern technical means will allow the architect partly to move and partly to destroy the elements which make up volume; that is to say, to open volume out upon space. The interior, opened by this mobility, will blend with the rest of space and take on architectural values through the functioning of each section.

**THE CUBE WILL NO LONGER EXIST.**  
Walls and openings will become a subordinate part of the building,—they will be movable. The only stable elements left will be the uprights, about which all living necessities will be centralized.

The new schools of plastic architecture make use of modern technical means, and the latter serve not only to construct but also to create the forms in which the courage of abstract creation will henceforth actualize itself.

It will thus be seen that the creative thought of the architect has left the path prepared for it by classic architecture; for that path was a blind alley.

Having left this path, the architect found new conceptions rapidly succeeding each other, and each time of course the theory anticipated the technical possibilities of realization.

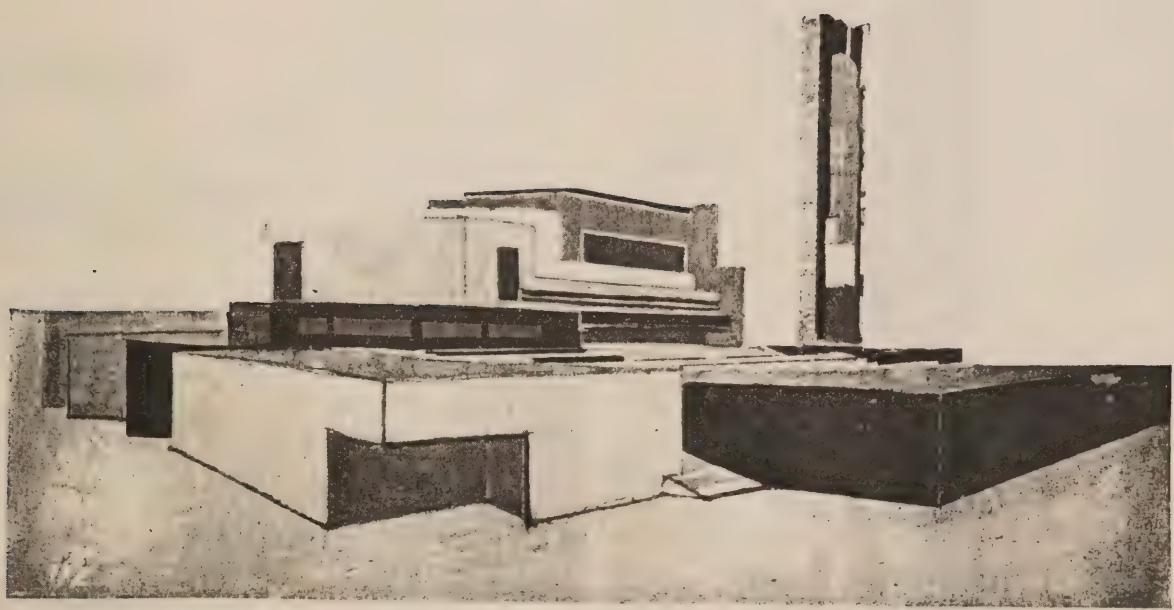
Every day, however, is bringing us new technical possibilities and new experiences.

Cubism, purism and suprematism have already become links in the long chain of architectural creation, and **OPEN VOLUME** will soon be one more such link.

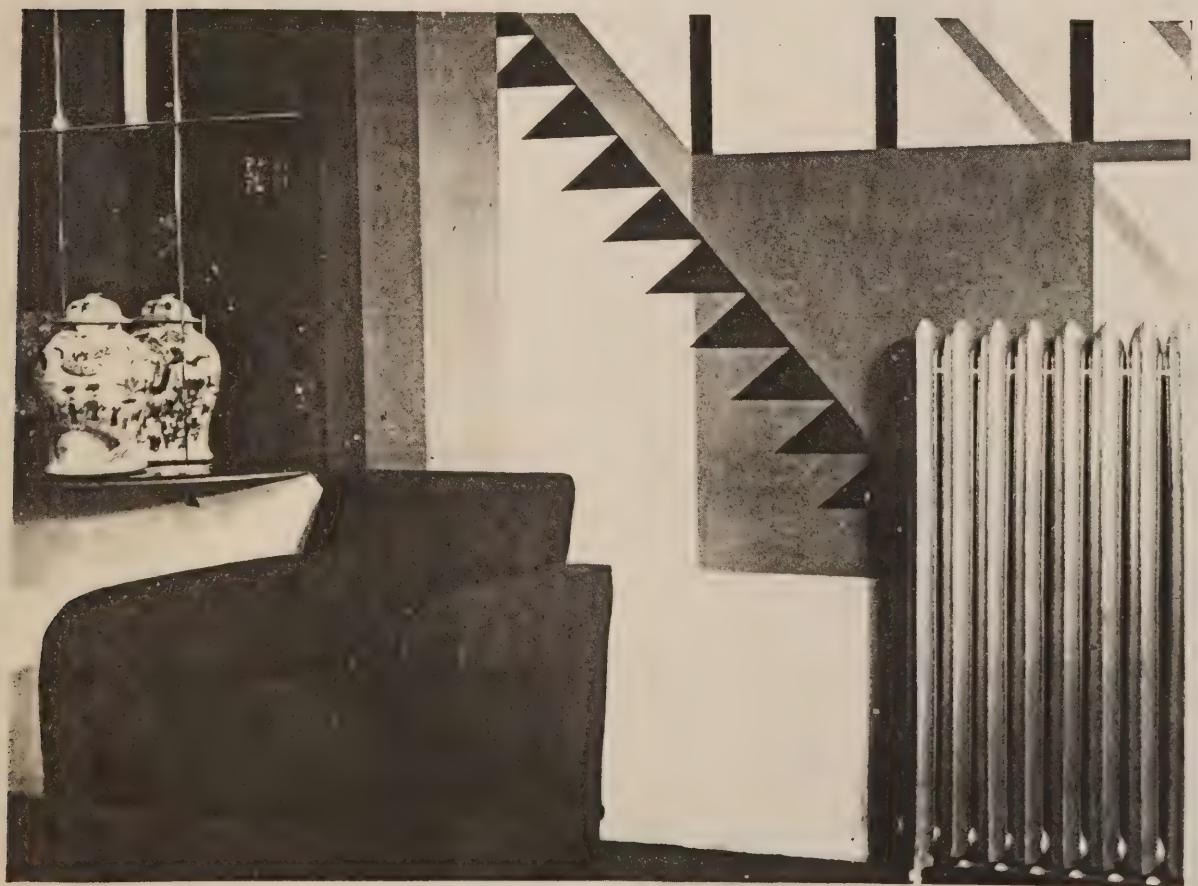
**S. SYRKUS**

Warsaw, 1926.





PROJECT FOR A CHURCH  
By H. Oderfeld and S. Syrkus, Warsaw



CONFECTIONER'S SHOP  
By Stanisław Brukalski, Warsaw



# POLAND

## ST. BRUKALSKI

214-220 Confectioner's Shop.

## ST. AND B. BRUKALSKI

221-223 Country Church.

## J. MALINOWSKI

244 Interior of a Bed Room.

## W. STRZEMINSKI

225 Cafe.

## S. SYRKUS, IN COLLABORATION WITH

## W. STRZEMINSKI

226-228 Fur Shop.

## H. STAZEWSKI

229 Office.

## H. ODERFELD, S. SYRKUS

230-234 Plan of a Church.

## B. LACHERT, L. NIEMOJOWSKI,

## J. SZANAJCA

235-238 Inexpensive Houses.

## B. LACHERT, J. SZANAJCA

239 Villa a Gdynia.

## B. LACHERT

240 Architect's House.

## J. SZANAJCA

241 Notary's House.

## B. LACHERT, J. SZANAJCA

242 Wooden Country House.

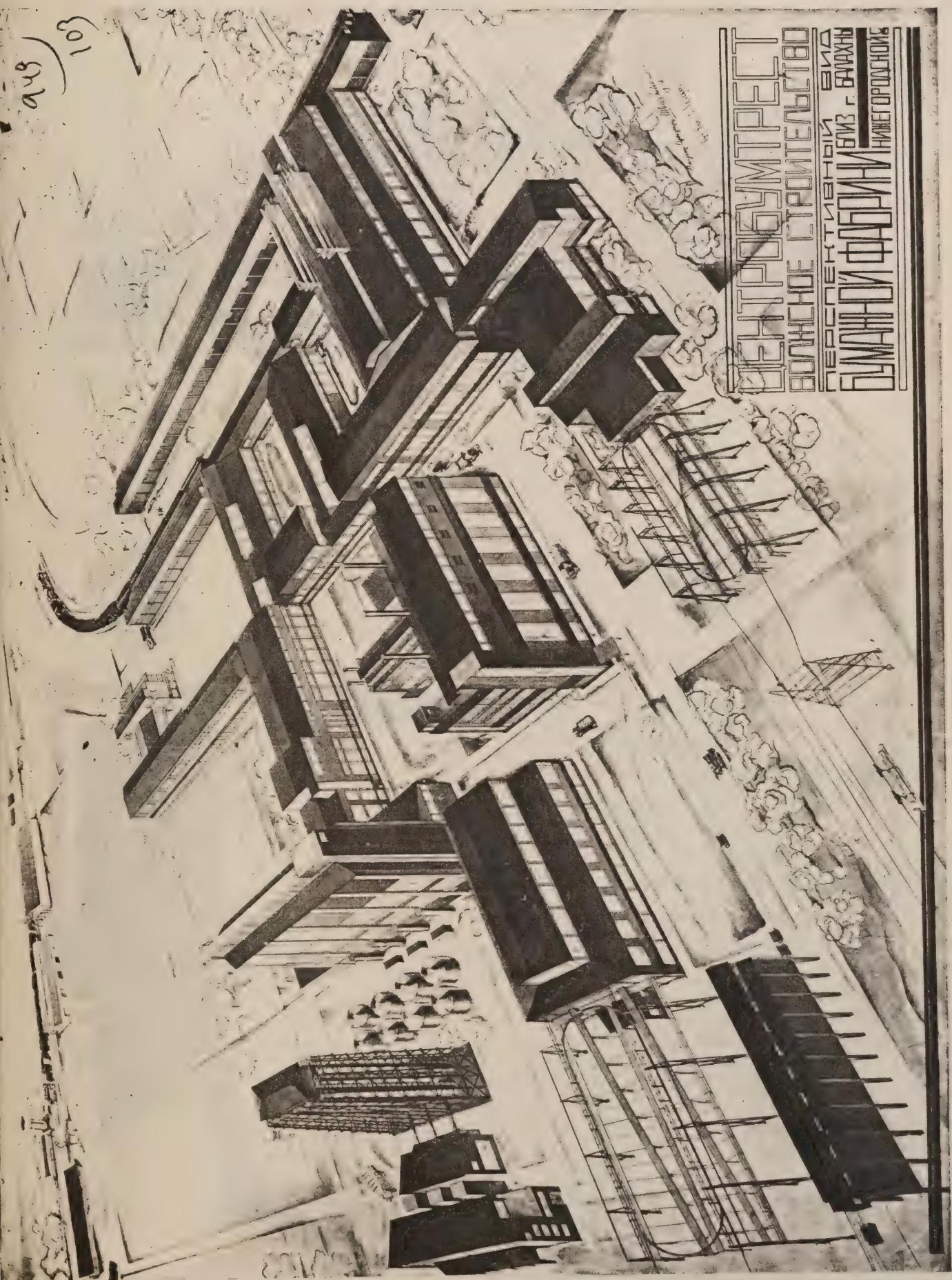
## B. LACHERT, J. SZANAJCA

243 Houses En Serie.  
Plan of the School of Political Sciences at  
Warsaw.

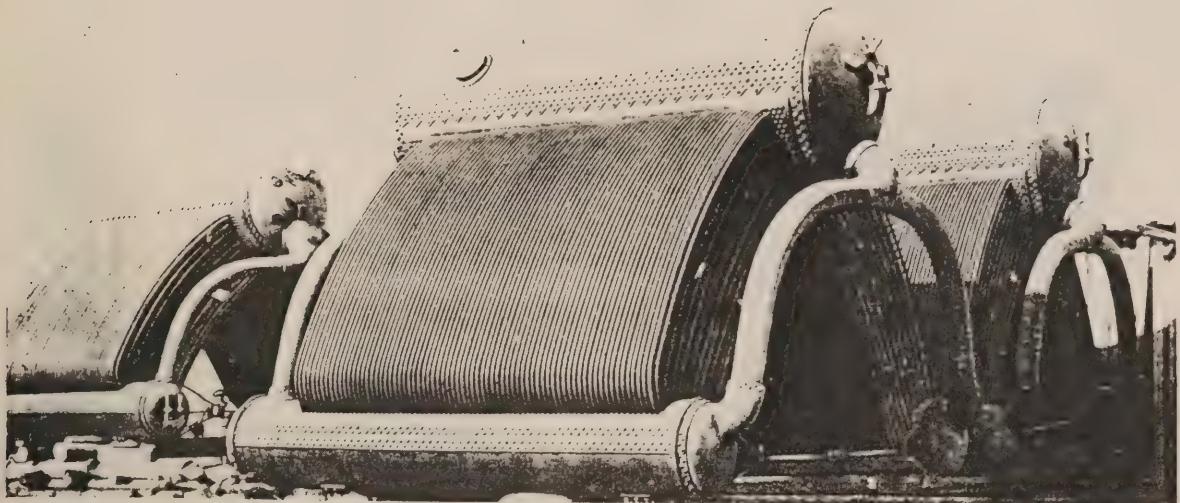


RUSSIAN INDUSTRIAL ARCHITECTURE  
*Photograph Amtorg Trading Corp.*

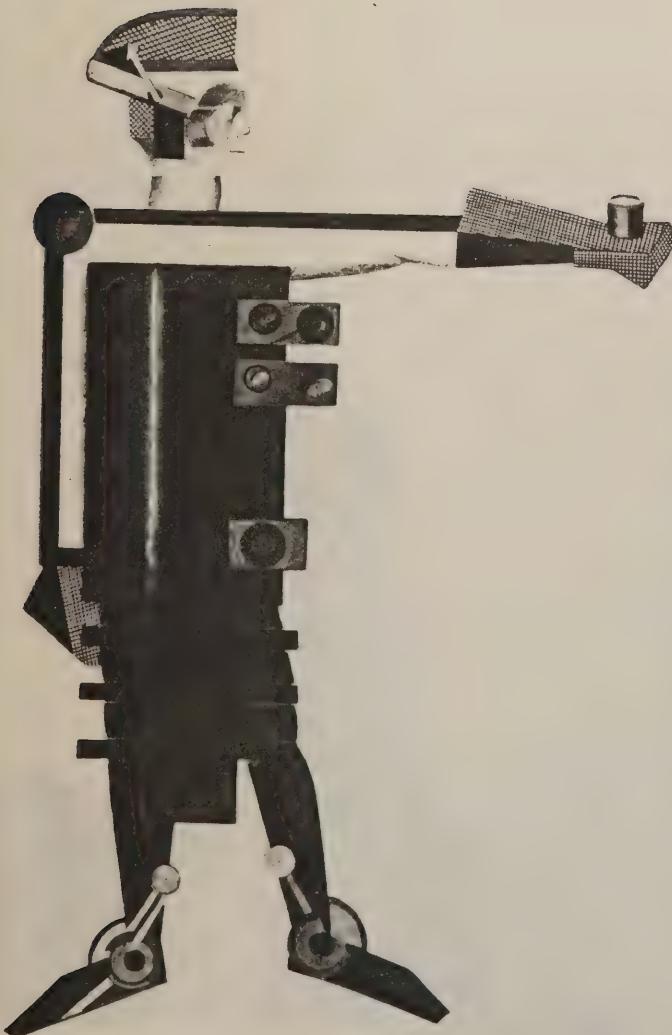








BOILERS  
*Russian*



COSTUME FOR MECHANICAL THEATRE  
*By Alexandra Exter, Russia*

## RUSSIA

244-273 Work of the Society "OSA".

274-281 Work of the Association "ASNOVA".

282-288 Work of Mellnikoff.

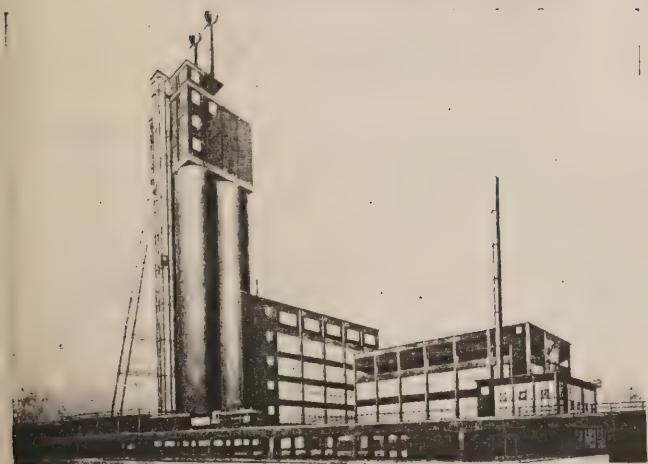
The Russian Section will arrive too late to catalogue in detail.

289 Boilers.

290-294 Industrial Architecture Photographs loaned by Amtorg Trading Corp.

NOTE—Russian Section except Industrial Photographs courtesy of The American Society for Cultural Relations with Russia.





INDUSTRIAL ARCHITECTURE  
Russia



TORSO  
*By Gabo*

**GRAYBAR ELECTRIC CO.**

- 361 Electric Ironer.  
362 Hamilton Beech Electric Motor.

**TCHLIETCHEFF**

- 363-368 Machine—Age Costume Designs.

**HANS ARP**

- 369-372 Decorations.

**FRANKLIN SIMON & CO.**

- 373 Screens: Courtesy of Display Dept.

**JOHN STORRS**

- 374 Sculpture in Metal Design for Clock Tower.

**BARTLETT HAYWARD CO.**

- 375 Blue Print of Waterless Gas Holder.  
376 Photograph of Waterless Gas Holder.

**LOUIS LOZOWICK**

- 378 Lord and Taylor Centennial.  
a—Setting for Fashion Show.  
b—Window Display.  
379 Stage Setting for "Gas".  
380 Machine Ornament (series).  
400 American Cities.



LABOUR BUILDING, MOSCOW  
*By Vesnin*



# MACHINE-AGE EXPOSITION

THE Machine-Age Exposition will show actual machines, parts, apparatuses, photographs and drawings of machines, plants, constructions, etc., in juxtaposition with architecture, paintings, drawings, sculpture, constructions, and inventions by the most vital of the modern artists.

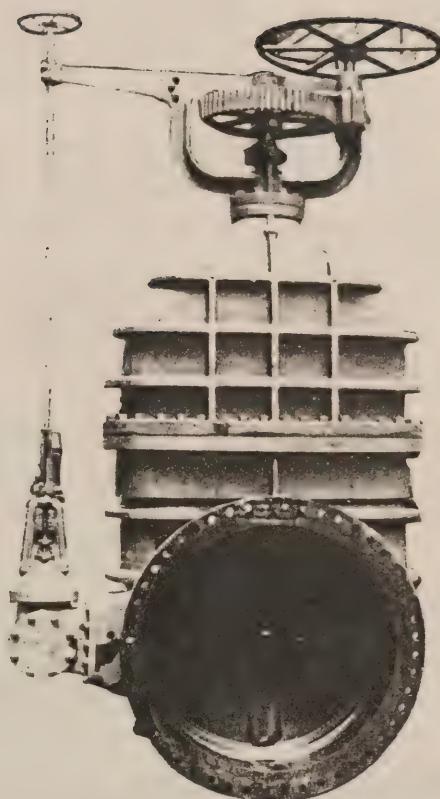
There is a great new race of men in America: the Engineer. He has created a new mechanical world, he is segregated from men in other activities . . . it is inevitable and important to the civilization of today that he make a union with the architect and artist. This affiliation will benefit each in his own domain, it will end the immense waste in each domain and will become a new creative force.

The snobbery, awe and false pride in the art-game, set up by the museums, dealers, and second-rate artists, have frightened the general public out of any frank appreciation of the plastic arts. In the past it was a contact with and an appreciation of the arts that helped the individual to function more harmoniously.

Such an exaggerated extension of one of the functions . . . the extension of the mind as evidenced in this invention of Machines, must be a mysterious and necessary part of our evolution, see in the Machine nothing but a menace or a utility. There are others who are alive; who have become impatient with the petrified copying of the dead and dying; who are interested in things dynamic.

## WE ADDRESS OUR EXPOSITION TO THESE

We will endeavor to show that there exists a parallel development and a balancing element in contemporary art. The men who hold first rank in the plastic arts today are the men who are organizing and transforming the realities of our age into a dynamic beauty. They do not copy or imitate the Machine, they do not worship the Machine,—they recognize it as one of the realities. In fact it is the Engineer who has been forced, in his creation, to use most of the forms once used by the artist . . . the artist must now discover new forms for himself. It is this



GATE-VALVE 72"  
By Crane Co.

"plastic-mechanical analogy" which we wish to present.

The artist and the engineer start out with the same necessity. No true artist ever starts to make "beauty" . . . he has no aesthetic intention—he has a problem. No beauty has ever been achieved which was not reached through the necessity to deal with some particular problem. The artist works with definite plastic laws. He knows that his work will have lasting value only if he consciously creates forms which embody the constant and unvarying laws of the universe. The aim of the Engineer has been utility. He works with all the plastic elements, he has created a new plastic mystery, but he is practically ignorant of all aesthetic laws. . . . The beauty which he created is accidental.

Utility does not exclude the presence of beauty . . . on the contrary a machine is not entirely efficient without the element of beauty. Utility and efficiency must take into account the whole man. Let us take one of the simplest and most obvious examples . . . the motor car. Take the first cars . . . the lack of rhythmic balance in their organization, their stupid, sterile,



vertical lines frustrated all feeling of horizontal motion and velocity. Today the finest cars with their rhythmic coordination of lines induce a consciousness of velocity and motion even greater than their actual speed in miles per hour.

The experiment of an exposition bringing together the plastic works of these two types of artist has in it the possibility of forecasting the life of tomorrow. All of the most energetic artists, both here and in Europe: painters, sculptors, poets, musicians, are enthusiastically organized to support this exposition, the Engineers are giving it their interested cooperation.

—jh.

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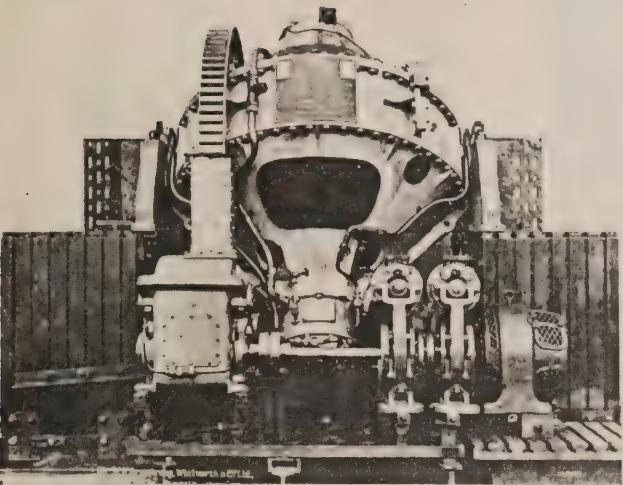
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GYROSCOPE STABILIZER  
By E. E. Sperry

## THE POETRY OF FORCES

..... Although we may come unacknowledged, as poor relations, still we turn to our fellow scientists, and salute them as furnishing us with tools and symbols for our work, for indeed we feel more related to them than to the brotherhood of poets who continue to build poems from materials with which we should blush to be guilty of concern. It is interesting to be shown by the scientists that the gases composing the air we breathe are electricity, as are likewise all the elements of the material universe. Penetrated, permeated, and in a sense created, as we are by this force, it follows that the human mind is no exception—it too is electricity.

We find it not only natural and poetic to become practitioners of the poetry of forces, but inevitable. From this basis, or spring-board, we plunge mentally and boldly into the seething universe of electrons and vibrations, beyond which forces repose. Having reduced all the elements to their common denominator, electricity, we move about more freely, in ethereal behavior. We have apparently reached the common substance out of which diversity springs. But it is necessary to say something like this: if the common germ thinks like a plant, it will unfold a plant; if it thinks of itself as a fish, it will dart forth a fish. This seems to hint the identity of subject and object: to turn perception in a direction where it no longer views the evolution of ages, but where it beholds the instantaneous manifestation of forces.

MARK TURBYFILL

## MODERN GLASS CONSTRUCTION

SUPPLYING daylight to buildings is one of the most important problems of the architect. This problem becomes more complicated as the cities become more congested and buildings are closer to each other. So far, windows and, in the upper stories, skylights have been the only possible means of supplying daylight to the interior of buildings, as there was no practical way of constructing luminous walls which would preserve the necessary privacy, be poor conductors of heat and cold, need no upkeep and give the protection necessary for the average building. The problem has been simplified by the fact that in modern building construction the outside walls usually do not have to carry any load in addition to their own weight, being simply curtain walls. The inside partitions are also only intended to divide the space into rooms, the entire weight of the building being carried by steel columns and beams.

The solution of this problem has now been accomplished by the use of glass units designed in a way that they would distort the light rays to such an extent that all transparency is eliminated. This has been obtained without the use of any milky or other admixture in the glass material which would decrease the transmission of light. The individual glass units are assembled with cement mortar to form tiles or blocks of a convenient size for masons to lay up in walls, each tile having a cement border to supply the necessary suction for the mortar used in laying up the tiles to set in the same length of time it would take in the case of concrete tile, and at the same time emphasizing the structural nature of the work.

Buildings constructed in this manner receive the greatest possible amount of light. Windows may be inserted in the walls wherever it is desired to have a view of the outside. This construction presents to the eye the same solid appearance as a brick wall while affording the same protection as to visibility of the interior from external observation. The interior of the wall forms a luminous surface shedding the greatest amount of light possible without the disadvantage of large window surfaces which destroy privacy, admit too much heat and cold, and also are a source of continuous expense for upkeep.





RAVENNA MOSAICS, INC.  
*The Five Wise and the Five Foolish Virgins*  
Design by Prof. E. Dulberg Weimar

These glass tiles may also be used for inside partitions, allowing daylight to pass from one room to another and yet at the same time assuring to the occupants all the advantages of complete enclosure.

This principle of lighting up spaces by means of large luminous surfaces in preference to comparatively small spots of light may be applied to artificial light as well as to daylight. Ornamental glass relief ceilings may be installed in rooms about eighteen inches below the plaster ceiling.

Electric light bulbs may be installed in the space between the two ceilings in a manner to throw the light against the ceiling which, in turn, reflects it from the relief glass to the room below. By the use of amber-colored glass the effect of warm sunshine may be achieved, lending a most pleasant atmosphere to the entire room. The treatment of the ceiling in relief prevents the light from being "spotty" and makes the entire effect harmonious.

FREDERICK L. KEPPLER



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# Vita Glass

The new window glass that transmits the ultra-violet health rays of the sun

**T**ODAY, buildings are being designed especially to let in sunlight. And yet the sunlight that their windows admit has been robbed of all its health value. For ordinary window and plate glass do not transmit the vital ultra-violet rays of the sun—rays that promote health, help to prevent rickets in children, kill germs and increase mental and physical energy. Vita glass does transmit these rays. It is now possible therefore to bring outdoor health indoors.

Vita glass is genuine glass, manufactured in two forms—clear and cathedral. Both glasses are supplied cut to specifications, ready for installation, each light bearing the trade-marked label. Because of the importance of Vita glass to health, its installation naturally increases re-sale values and makes houses, apartments and offices easier to rent.

The value of Vita glass is attested by eminent authorities. We should be glad to furnish details. Vitaglass Corporation, 50 East 42nd Street, New York City.

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